MANGA STUDIO® 5

The Standard in Manga & Comic Illustration

TOOL SETTING GUIDE

SMITHMICRO SOFTWARE

CELSYS

Changes in Ver.5.0.4

Additions and/or changes in MANGA STUDIO between Ver.5.0.3 and Ver.5.0.4 are as follows.

Memo **Functions added in MANGA STUDIO Ver.5.0.4 are marked with a "*" in the text.**

- "Eye dropper"

  [Non-reference layer] has been added. It allows you to configure layer(s) to not refer to.

- "Font"
  - How to display the font list view to select a font from [Font] can now be customized. You can now select a font by checking the preview.
  - The font list function has been added. It allows you to create and edit a [Font list] that only contains frequently used fonts.

- "Select layer"

  [Do not select fill in mono] has been added. It allows you to exclude the [Fill in monochrome] and [Paper] layers from the targets of layer selection.

- "Continuous curve"

  The name and layout of items have been changed. However, the function itself remains the same.

- "Redraw"

  [Fix end] can now be selected from icons.

- "Image settings"

  [Emphasize outline] has been added to [How to correct]. It allows you to limit the blurring of outlines during transform.

- "Create frame"

  [White layer] has been renamed to [Fill inside the frame]. However, the function remains the same.

- "Saturated line *"

  The [Saturated line] category has been added. It allows you to configure settings to draw/edit saturated lines with the [Saturated line] sub tool and the like.

- "Erase"

  Not also [Vector] layers but also [Frame border folders] are now referred to when [Refer all layer] is turned on for [Erase].

- "Shape operation"

  [Rotate after fixed] has been renamed to [Adjust angle after fixed].

- "Pinch line"

  [Fix end] can now be selected from icons.

- "Fill" → "When the Fill Tool or Auto select Tool Is Selected"

  [Snap to symmetrical ruler] has been added. It allows you to snap the [Fill] tool and [Auto select] tool to [Symmetrical ruler].

- "Drawing position *"

  The [Drawing position] category has been added. It allows you to configure a drawing position to draw with the [Saturated line], [Stream line], or [Flash] sub tool.

- "Drawing interval *"

  The [Drawing interval] category has been added. It allows you to configure the space between lines for every line to draw with the [Saturated line], [Stream line], or [Flash] sub tool.

- "Create Balloon"

  [Combine with the text in the drawing area] has been added. It combines the balloon layer with the text layer when a balloon is drawn in an area with text.

- "Brush size"

  [Disarray] has been added. It changes the brush size for every line when drawing with the [Stream line] tool or [Saturated line] tool.

- "Stream line *"

  The [Stream line] category has been added. It allows you to configure settings to draw/edit stream lines with the [Stream line] sub tool and the like.

- "Reading"
  - How to display the font list view to select a font from [Reading font] can now be customized. You can now select a font by checking the preview.
  - The font list function has been added. It allows you to create and edit a [Font list] that only contains frequently used fonts.

- "Cut frame border *"

  The name and layout of items have been changed. However, the function itself remains the same.
  - [Shape of curve] has been renamed to [Shape of division], and is now settable with icons.
  - [Separate folder] has been renamed to [Dividing method], and its options are now available as icons.

Before You Read This Guide

Thank you for choosing Manga Studio 5.0. The following describes points to keep in mind when reading this guide.

About This Guide

This guide is an introduction to the settings of tools and sub tools of Manga Studio 5.0. It describes each of the items on the [Tool property] palette, including the [Sub tool detail] palette.

For other functions, see "Manga Studio 5.0 User Guide".

About The Content of This Guide

This guide (including data) has been prepared and edited based on the product program available as of February 2014 and may differ from the actual product program specifications.

About Operations Described in This Guide

Operations in this guide are described based on the Windows version unless otherwise noted.

If you are a Mac OS X user, replace and read as follows: By replacing, operation on both Windows and Mac OS X has the same meaning.

Windows	Mac OS X
[Alt] key	[Option] key
[Ctrl] key	[Command] key
[Enter] key	[Return] key
[Backspace] key	[Delete] key
Right click (of mouse button)	Mouse click with the [Control] key down

Symbols Used in This Guide

In this guide, symbols are used for operation-related comments. The symbols have the following meaning:

The [Anti-aliasing] category may not be available for layers whose [Expression color] is [Monochrome].

Indicates tips and supplementary information useful when using Manga Studio 5.0.

References

References to other parts of this guide as well as other documents are indicated using "" (double quotation marks).

About Manga Studio 5.0[Editions]

Manga Studio 5.0is available in two editions: Manga Studio 5.0, and Manga Studio 5.0 EX. This guide describes the operating procedure of all three editions. Functions restricted to an edition are marked with a symbol indicating the edition.

Unmarked	Indicates a function common to Manga Studio 5.0 , and Manga Studio 5.0 EX.
[EX]	Indicates a function available only in Manga Studio 5.0 EX.

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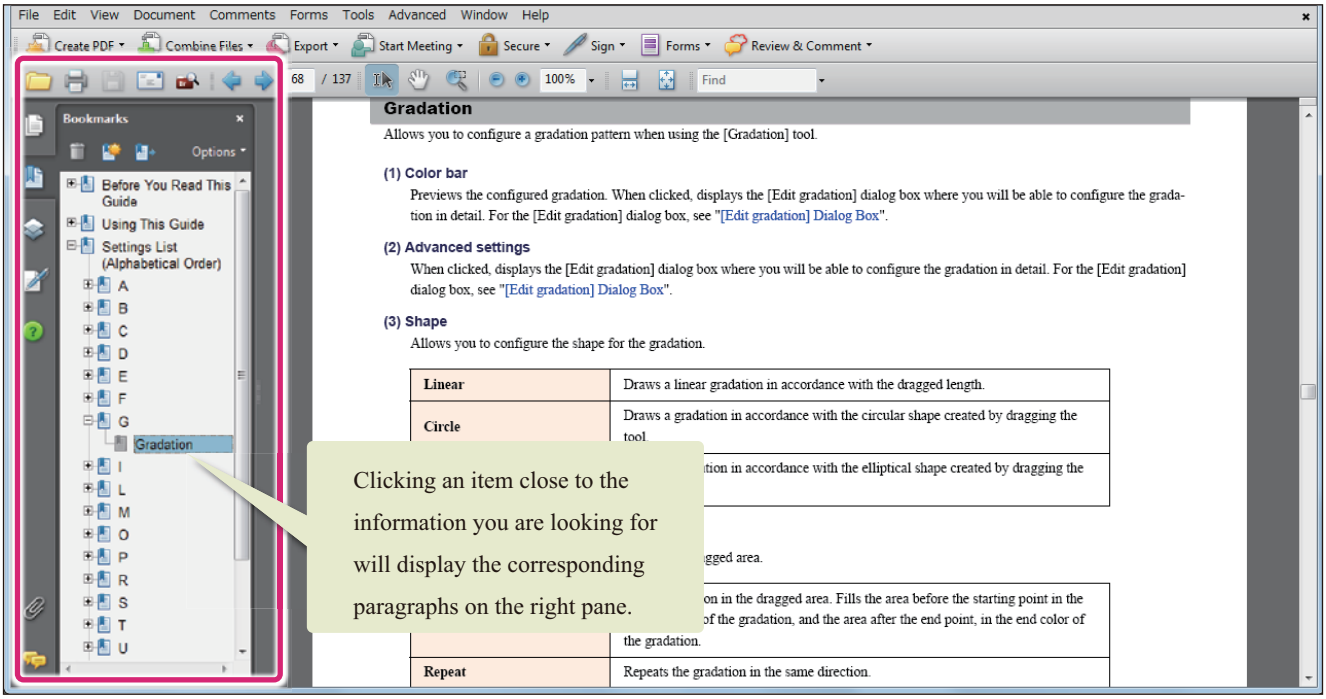
How to Use the Manual

This chapter describes how to find the desired information using the manual.
There are two methods to find information fin the manual: using the Table of Contents and using the search function.

Finding Information from the Table of Contents

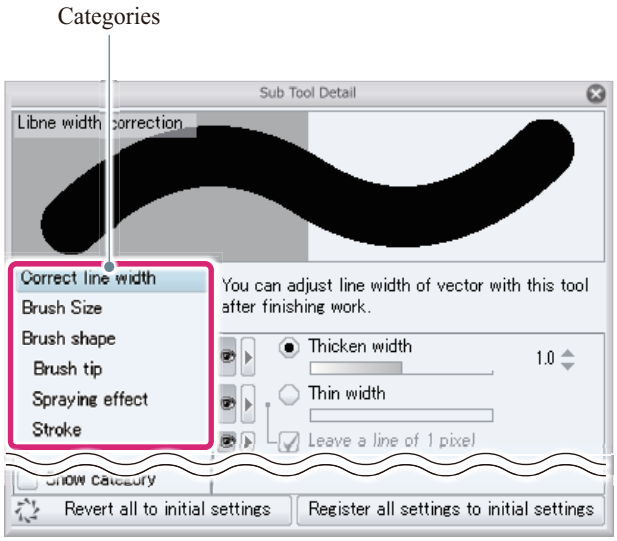
The description of the setting items of the [Subtool details] palette are described in "Settings List (Alphabetical Order)" . The items are sorted by category and arranged in the order of the Japanese syllabary. If you click the item of the information you want to see, the information is displayed on the right.


Bookmarks
Options
Before You Read This Guide
Using This Guide
Settings List (Alphabetical Order)
A
B
C
D
E
F
G
Gradation
I
L
M
O
P
R
S
T
U
Gradation
Allows you to configure a gradation pattern when using the [Gradation] tool.
(1) Color bar
Previews the configured gradation. When clicked, displays the [Edit gradation] dialog box where you will be able to configure the gradation in detail. For the [Edit gradation] dialog box, see "[Edit gradation] Dialog Box".
(2) Advanced settings
When clicked, displays the [Edit gradation] dialog box where you will be able to configure the gradation in detail. For the [Edit gradation] dialog box, see "[Edit gradation] Dialog Box".
(3) Shape
Allows you to configure the shape for the gradation.
Linear
Draws a linear gradation in accordance with the dragged length.
Circle
Repeats the gradation in the same direction.
Clicking an item close to the information you are looking for will display the corresponding paragraphs on the right pane.

About the Table of Contents of this Document

This document introduces functions for each category of the [Subtool details] palette To find information from the Table of Contents, it is recommended to find the category name first.

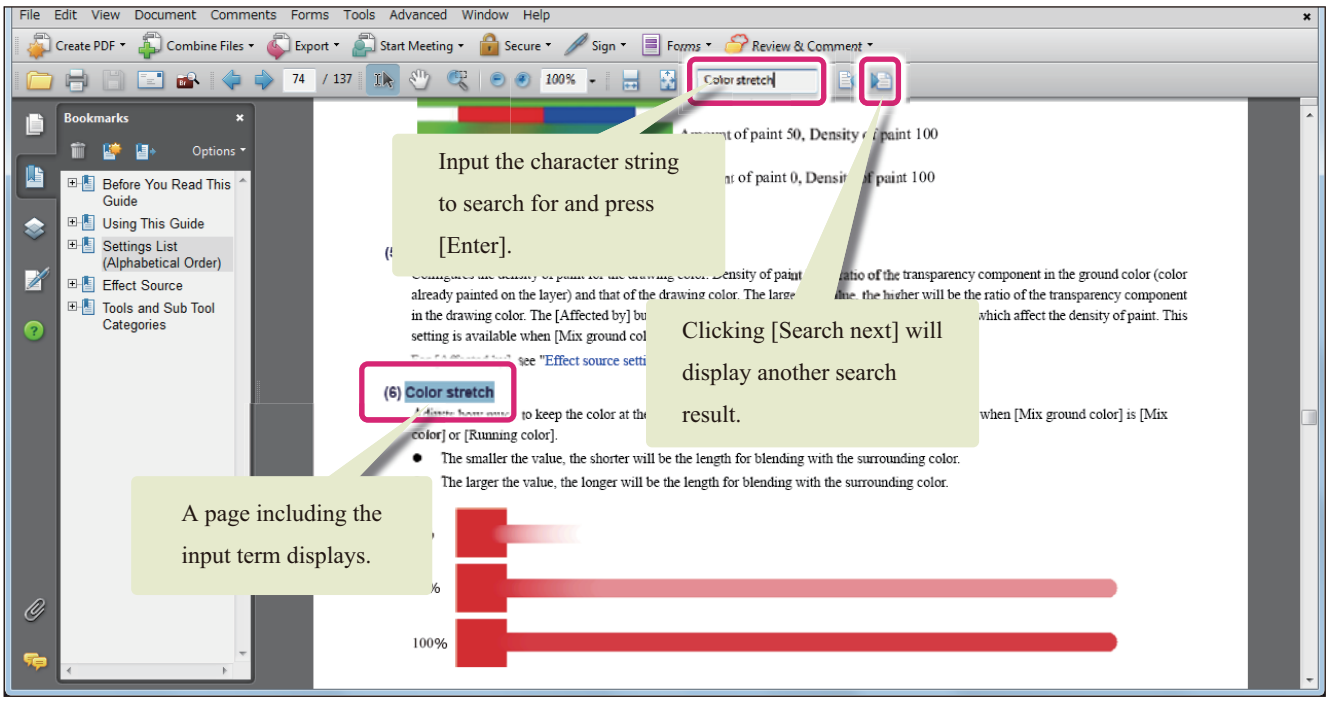
The settable categories vary according to the tool or subtool. For the settable categories for each tool and subtool, see "Tools and Sub Tool Categories" .



Using the Search Function to Find Information

If you press [Ctrl]+[F] key, the search field is displayed in the window of the manual. If you enter the character string to search and press the [Enter] key, a page including the matched term is displayed.

If no information you want to find is included, click the [Find next] icon on the right of the search field and then another page will be displayed.


Input the character string to search for and press [Enter].
Clicking [Search next] will display another search result.
A page including the input term displays.
Color stretch
(6) Color stretch

Settings List (Alphabetical Order)

This chapter is a list of settings on the [Sub tool detail] palette, described by category, and in alphabetical order.

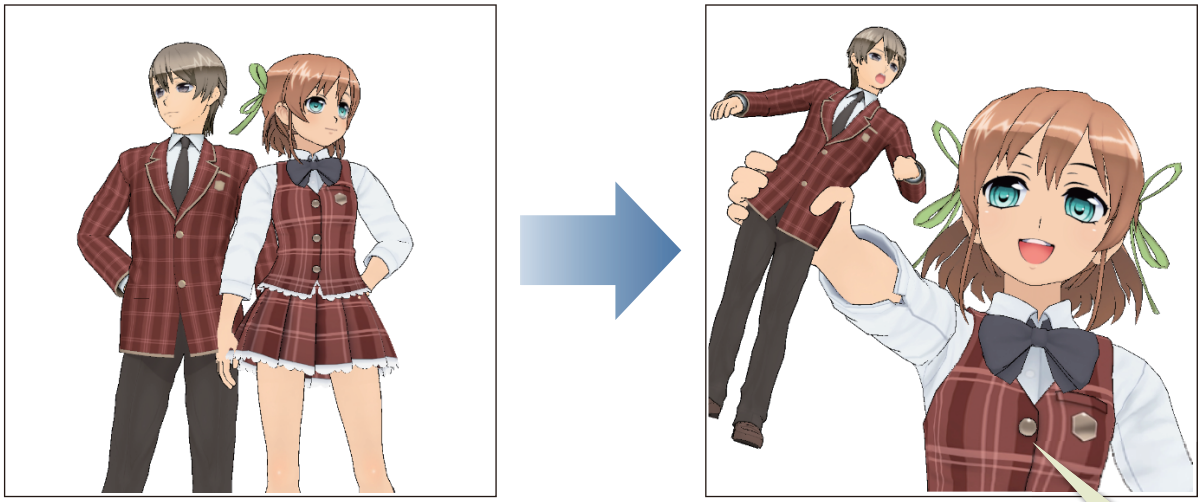
A

Allocate

Allows you to configure the position of the 3D material when a 3D material is selected with the [Object] sub tool, for example.

(1) Object scale

Scales up/down the selected 3D material. Moving the slider to the right scales up the 3D material.



3D character material enlarged by [Object scale].

(2) Ground

Grounds the 3D material to the base (floor) of the 3D space.

Memo **Base of the 3D space means the grid displayed when a 3D material is clicked. It is equivalent to the floor of the 3D space.**

(3) Position

Moves the 3D material.

X	Moves the 3D material horizontally.
Y	Moves the 3D material vertically.
Z	Moves the 3D material back and forth.

(4) Whole rotation

Rotates the 3D material.

X	Rotates the 3D material about the X-axis.
Y	Rotates the 3D material about the Y-axis.
Z	Rotates the 3D material about the Z-axis.

(5) Partial rotation

Rotates the selected part of the 3D character material.

X	Rotates the selected part in the X-axis direction.
Y	Rotates the selected part in the Y-axis direction.
Z	Rotates the selected part in the Z-axis direction.

Memo **If [Joint angle limit] is turned on for [Pose] on the [Sub tool detail] palette, rotation of the part may be limited.**

Anti-aliasing

Allows you to configure anti-aliasing for lines, borders, and so on.

Important **The [Anti-aliasing] category may not be available for layers whose [Expression color] is [Monochrome].**

(1) Anti-aliasing

Applies anti-aliasing to lines. With anti-aliased lines, you can draw smoother outlines as jags are smoothed. Select [None] when not applying anti-aliasing. When applying, you can select its strength from [Little], [Moderate] and [Strong].

In addition, the following tools and sub tools are provided with a check box to specify whether or not to enable anti-aliasing.

- Marquee tool (Shrink selection)
- Auto select
- Fill tool (Refer edited layer only, Refer all layers, Close and fill, Paint unfilled area)
- Gradient

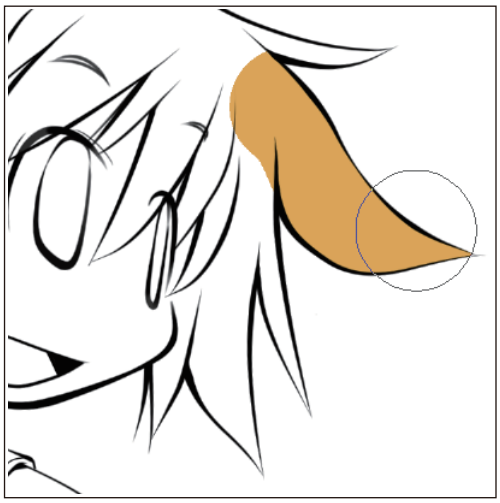
Anti-overflow

Allows you to draw without running over the lines drawn on the reference layers.

(1) Do not exceed line of reference layer

Draws by referring to the reference layers to not run over the lines.

When the brush tip runs over a line, only the side that includes the brush tip center is drawn.



Do not exceed line of reference layer: ON

Do not exceed line of reference layer: OFF

(2) Stop filling at center line of vector

When vector layers are referred to, the vector center lines are referred to stop filling.

(3) Color margin

Configures the color margin (tolerance) to recognize a color as the same as that of a line drawn on the referred layer. The larger the value, the larger is the tolerance to include areas in different colors.

(4) Area scaling

Draws an area enlarged or reduced from the original by the number of specified pixels.

(5) Zoom method

Configures the shape of corners of the scaled area when [Area scaling] is turned on.

Rectangle	Determines the area by placing a rectangle on each pixel on the outline of the area to enlarge or reduce. The outline of the enlarged or reduced area often becomes rectangular.
Round	Determines the area by placing a circle on each pixel on the outline of the area to enlarge or reduce. The outline of the enlarged or reduced area becomes round as angles are rounded off.
To darkest pixel	Recognizes the area with the darkest color (area with highest opacity) and draws up to that area.

B

Balloon

Allows you to configure a color for the balloon's line and the fill color when a balloon is selected with the [Object] sub tool.

(1) Line and ground

Configure whether to draw the balloon's line and/or ground.

Create ground	Fills the balloon's ground. No outline is drawn for the balloon.
Create line	Draws the balloon using only outline.
Create line and ground	Draws the balloon's outline and fills the ground. The drawing colors for the outline and ground can be specified by [Line color] and [Ground color].

(2) Line color

Configures the color for the balloon's line. Clicking the color indicator displays the dialog box for selecting a color.

(3) Ground color

Configures the color for painting the inside of the balloon. Clicking the color indicator displays the dialog box for selecting a color.

(4) Opacity of ground

Configures the opacity of the balloon's ground.

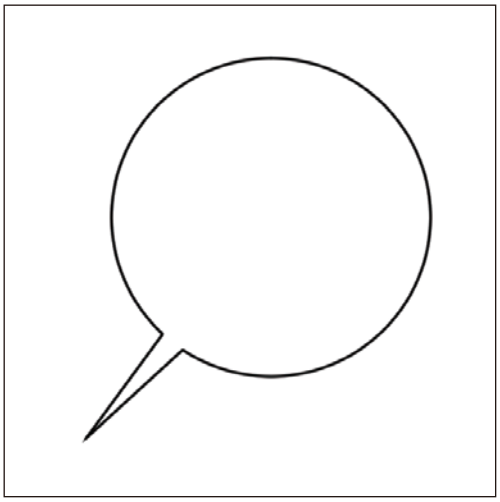
! Important **[Opacity of ground] is not available for balloon layers whose [Expression color] is [Monochrome].**

Balloon tail

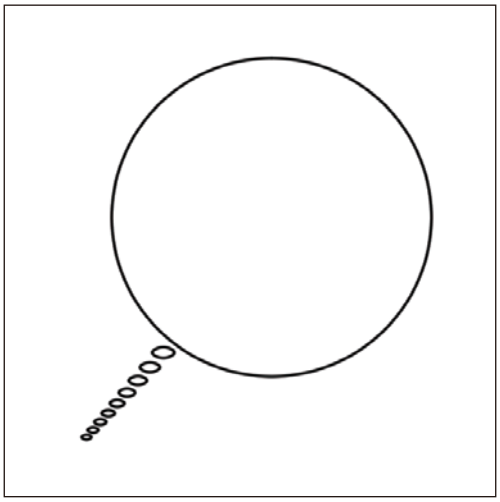
Allows you to configure the type of tail, its width and the like when using a tool or sub tool for creating a balloon tail.

(1) Type of balloon tail

Configures the type of tail. You can select from [Normal] and [Rounded].



Type of balloon tail: Normal



Type of balloon tail: Rounded

(2) How to bend

Configure how to bend the balloon tail.

Linear	Draws a linear tail that does not bend.
Polyline	Draws a linear tail connecting multiple points.
Spline	Draws a curved tail connecting multiple points.

Memo

For how to draw a tail, see "Explanation: Balloons and Text" in "Manga Studio 5.0User Guide".

(3) Width of tail

Using the slider, configure the width of the tail at its base.

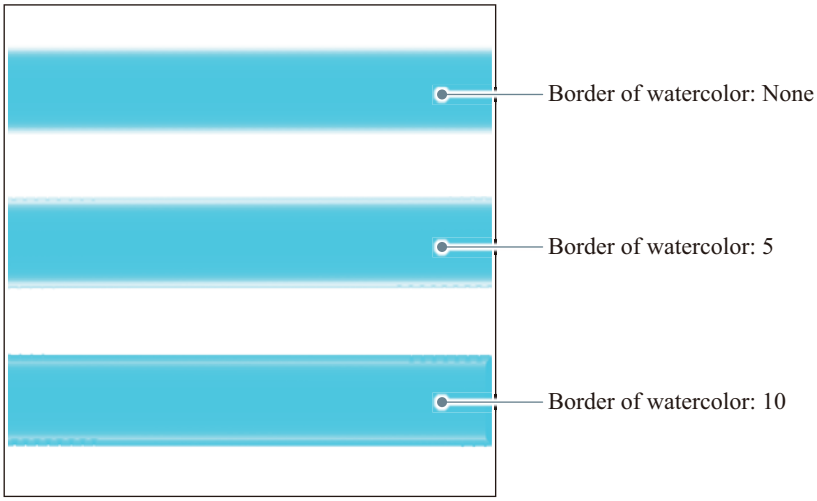
Border of watercolor

Allows you to configure how to express line edges when using a drawing-type tool. By configuring the width, opacity, brightness and the like for line edges, you can express pale, subtle changes in color such as with watercolor.

Important **Items in the [Border of watercolor] category are not available for [Vector] layers and layers whose [Expression color] is [Monochrome].**

(1) Border of watercolor

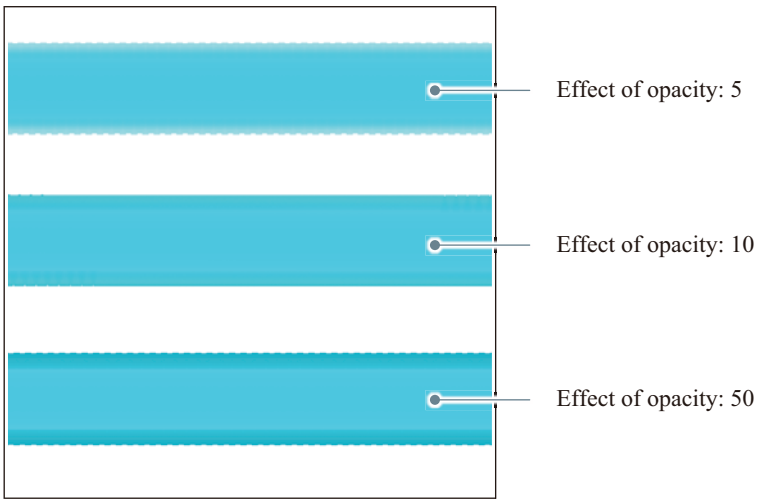
Toggles the effect for drawing border areas between on and off. Using the sliders, configure the width of the dark line border on the inside. The larger the value, the wider will be the dark border.



[Brush size: 100, Opacity impact: 20]

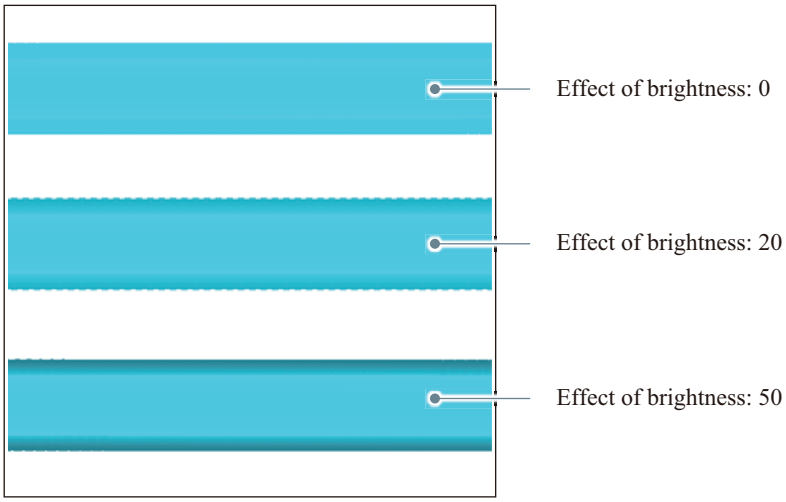
(2) Effect of opacity

Configures the opacity of the border. The larger the value, the darker will be the border.



(3) Effect of brightness

Configures the degree of making black the line border. The larger the value, the more black will be the border.



(4) Process after drag

Reflects the [Border of watercolor] setting after the line is drawn. This setting will allow you to process [Border of watercolor] faster when it is taking time.

(5) Blurring width

Configures the strength of the blur on the boundary of rendering. The larger the value is, the more blurred becomes the border.

Brush shape

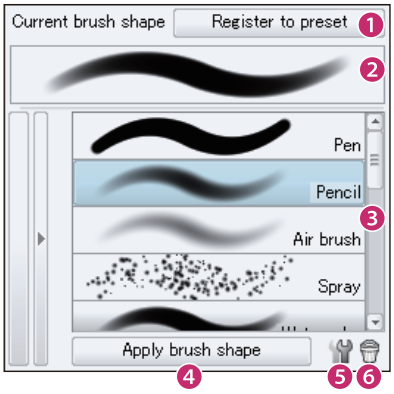
Lines on the canvas are drawn by connecting countless number of brush tip drawings.

Each of the items in [Brush shape] configures the following settings related to the drawing/shape of the brush tip and stroke.

Brush tip	Configures the shape of the brush tip. Some brush shapes allows you to combine multiple tip shapes to create a multi-brush. Also configures the density, hardness, thickness, direction and the like for the brush tip.
Spraying effect	Configures the setting applicable when spreading the brush tip drawing, as when drawing with a spray.
Stroke	Configures how to arrange the brush tip drawing to create the stroke.
Texture	Configures settings related to the texture of the drawing. Specifies the texture of the paper, strength and how to apply effects, and so on.

Furthermore, setting of the items below can be registered as default brush shape selection.

Memo **When items are displayed on the [Tool property] palette, you can only select preconfigured brush shapes.**



Important **Some settings may not display depending on the selected tool or sub tool.**

(1) Register to preset

Adds the information configured in [Brush tip], [Spraying effect], [Stroke], and [Texture] in [Preset brush shape].

(2) Preview

Previews the stroke by the current [Brush shape] settings.

(3) Preset brush shape

Displays the list of preconfigured brush shapes.

(4) Apply brush shape

Clicking the button replaces the [Brush tip], [Spraying effect], [Stroke], and [Texture] settings to those configured for the brush shape selected in [Preset brush shape].

(5) Rename brush shape

Clicking the icon allows you to rename the brush shape currently selected in [Preset brush shape].

(6) Delete brush shape

Clicking the icon allows you to delete the brush shape currently selected in [Preset brush shape].

Brush shape → Brush tip

Configures the shape of the brush tip. Some brush shapes allows you to combine multiple tip shapes to create a multi-brush.

Important **Some settings may not display depending on the selected tool or sub tool.**

(1) Tip shape

Select the brush tip shape from [Circle] and [Material]. Selecting [Material] allows you to change the brush shape as well as use multiple brush shapes combined.

(2) Brush tip

Displays the shape of the brush tip configured in the selected brush shape. When multiple brush shapes are displayed, you can change their display order by drag and drop.

Clicking ▼ on the right of the brush tip shape displays the [Select brush tip shape] dialog box where you can change the material for the brush tip.

[Select brush tip shape] Dialog Box

(1) Search box	Allows you to input a keyword and search for a brush tip shape.
(2) Tag list	A list of tags assigned to materials displayed as buttons. Clicking a button displays brush shapes meeting the specified information in [Brush tip shape list].
(3) Brush tip shape list	Displays the list of brush tip shapes.
(4) Show item checkbox	Shows a checkbox for each thumbnail of the brush tip shape shown in [Brush tip shape list]. You can select a brush tip shape by turning on the checkbox.
(5) Thumbnail [Large]	Shows the large thumbnails of the brush tip shapes shown in [Brush tip shape list].
(6) Thumbnail [Small]	Shows the small thumbnails of the brush tip shapes shown in [Brush tip shape list].
(7) Thumbnail [Detail]	Shows the thumbnails as well as information of the brush tip shapes shown in [Brush tip shape list].

(3) Add brush tip shape

Adds a material to [Brush tip].

Clicking displays the [Select brush tip shape] dialog box. Select the brush tip shape to add from the list of brush materials. Clicking [OK] adds the material to [Brush tip].

Memo **Selecting materials while holding down the [Ctrl] key or [Shift] key allows you to select multiple materials.**

(4) Delete brush tip shape

Deletes the brush tip shape selected in [Brush tip].

(5) Hardness

Configures the effect of the hardness. The smaller the value, the more blurred will be the lines.

(6) Thickness

Adjusts the thickness of the brush tip. The [Affected by] button allows you to select the settings of the tablet and the like which affect the thickness of the brush tip.

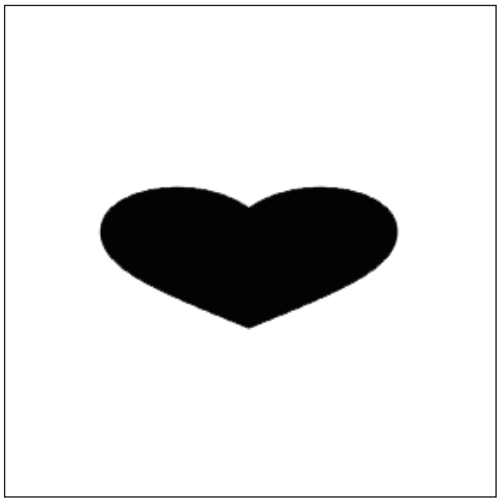
For [Affected by], see "Effect source settings" .

(7) Direction of applying

Configure the direction to which the brush thickness will apply.

Horizontal	The thickness changes in the horizontal direction.
Vertical	The thickness changes in the vertical direction.

When [Horizontal] is selected



When [Vertical] is selected

(8) Direction

Allows you to configure the direction of the brush tip. Moving the slider changes the direction of the brush tip from 0 to 360 degrees. The [Affected by] button allows you to select the settings of the tablet and the like which affect the direction of the brush.

For [Affected by], see "Effect source settings (Direction)" .

(9) Brush density

Configures the opacity of each tip hair of the selected brush. The [Affected by] button allows you to select the settings of the tablet and the like which affect the brush density. For example, configuring [Pen pressure] for [Affected by] makes it easier to vary the tone in accordance with the pen pressure.

For [Affected by], see "Effect source settings" .

(10) Adjust brush density by space

When turned on, the brush density is configured to decrease when space becomes narrow. The density is automatically adjusted so that opacity in the selected area is approximately constant.

Memo

For brush [Space], see "Brush shape → Stroke" .

Brush shape → Spraying effect

Configures settings related to the spread of the brush tip hair. Configuring [Spraying effect] allows you to spread the brush tip hair as it were a spray.

(1) Spraying effect

When turned on, spreads the tip hair of the selected brush as if it were a spray.

(2) Particle size

When [Spraying effect] is turned on, you can configure the size of each brush tip hair.

The [Affected by] button allows you to select the settings of the tablet and the like which affect the particle size.

For [Affected by], see "Effect source settings" .

(3) Particle density

When [Spraying effect] is turned on, you can configure the number of brush patterns to spread when spraying from the brush tip hair.

The [Affected by] button allows you to select the settings of the tablet and the like which affect the particle density.

For [Affected by], see "Effect source settings" .

(4) Spray deviation

When [Spraying effect] is turned on, you can configure the degree of concentration of the spraying effect by the brush tip hair.

(5) Direction of particle

When [Spraying effect] is turned on, you can configure the angle of each brush tip hair.

The [Affected by] button allows you to select the settings of the tablet and the like which affect the direction of the particles.

For [Affected by], see "Effect source settings (Direction of particle)" .

Brush shape → Stroke

Configures settings related to the stroke such as the space between brush tips.

Important **Some settings may not display depending on the selected tool or sub tool.**

(1) Space

Specifies the space between drawings. Select a space from [Fixed], [Wide], [Normal] and [Narrow].

Space (Wide, Normal, Narrow)

The space is automatically adjusted based on other settings (e.g., hardness).

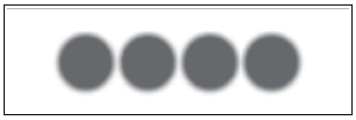
Fixed

Allows you to specify the drawing space numerically from the [Fixed] values listed below.

(2) Fixed value

When [Fixed] is specified for [Space], you can numerically specify the space between tips of the selected brush. The larger the value, the more spaced will be each of the brush tip drawings. The [Affected by] button allows you to select the settings of the tablet and the like which affect the fixed value.

For [Affected by], see "Effect source settings" .



[Fixed] to 100

[Fixed] to 10

(3) Continuous spraying

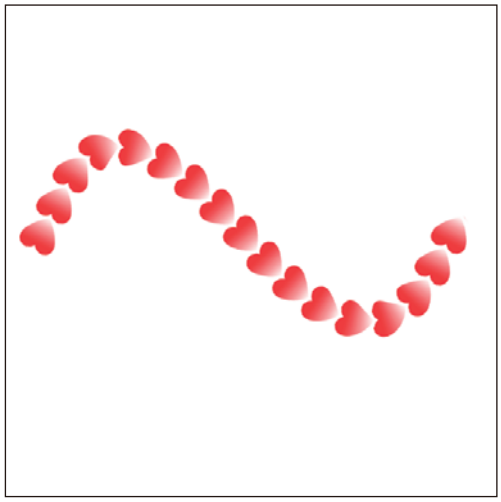
When turned on, pressing a pen on the same position overpaints the selected brush tip.

This setting allows you to easily draw lines of varied tones by varying the speed of the stroke. Slow strokes allow you to draw dark lines while fast strokes allow you to draw pale lines.

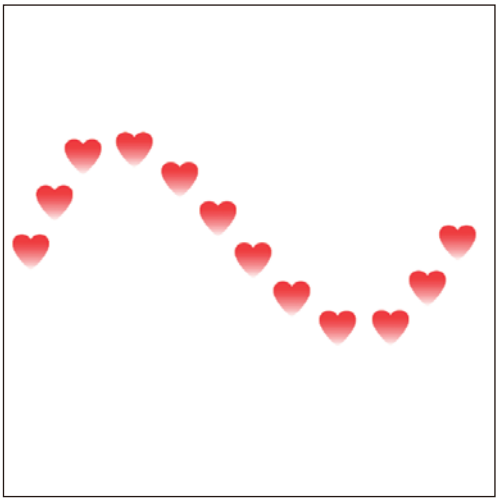
Important **[Continuous spraying] is not available when [Post correction] is turned on in the [Correction] category.**

(4) Ribbon

When turned on, the shape of the brush tip changes along the pen stroke. It creates a selection with a natural sequence of patterns.



Ribbon: ON



Ribbon: OFF

Important

[Ribbon] is not available in the following cases:

- **When [Spraying effect] is turned on**
- **When [Tip shape] is [Circle]**

(5) Repeat method

Configure the order for using the materials when using a brush tip composed of multiple materials. This setting is available when multiple materials are present in the [Brush tip].

Repeat	Uses the series of brush tip shapes repeatedly in order from left to right.
Reverse	Uses the series of brush tip shapes in alternate order from left to right and then from right to left.
Not repeat	Once the series of brush tip shapes is used in order from left to right, continues with the rightmost brush tip shape in [Brush tip].
Random	Uses the brush tip shapes in random order.

(6) Mix brush tips with darken

Allows you to configure how to overlap drawings. When turned on, the darker color is reflected. When turned off, the darkness of the color used first and that of the color afterwards are simply overlapped.

Brush shape → Texture

Configures settings related to the texture of the drawing. Specifies the texture of the paper, strength and how to apply effects, and so on.

(1) Texture

Selects the texture to configure for the brush. Allows you to draw with the touch of the selected texture.

Clicking the button displays the [Select paper texture material] dialog box where you can change the texture image.

[Select paper texture material] Dialog Box

(1) Search box	Allows you to input a keyword and search for a texture image.
(2) Tag list	A list of tags assigned to materials displayed as buttons. Clicking a button displays brush shapes meeting the specified information in [Texture image list].
(3) Texture image list	Displays a list of texture images.
(4) Thumbnail [Large]	Shows the large thumbnails of the texture images shown in [Texture image list].
(5) Thumbnail [Small]	Shows the small thumbnails of the texture images shown in [Texture image list].
(6) Thumbnail [Detail]	Shows the thumbnails as well as information of the texture images shown in [Texture image list].

(2) Texture density

Allows you to specify the strength for applying texture. This setting is available when [Apply by each plot] is turned on.

The [Affected by] button allows you to select the settings of the tablet and the like which affect the strength of texture to apply.

For [Affected by], see "Effect source settings" .

(3) Reverse density

Inverts the texture gradation.

(4) Emphasize density

Makes the difference in density in the texture image to be displayed clearly.

Memo

- **Turning on [Emphasize density] draws the texture with a touch close to IllustStudio.**
- **Turning on both [Emphasize density] and [Apply by each plot] when a relatively high value is configured for [Brush shape] → [Brush tip] → [Hardness] makes the center of the plot be drawn thicker.**

(5) Scale ratio

Specifies the scale ratio to apply to the texture image.

(6) Rotate angle

Specifies the rotation angle to apply to the texture image.

(7) Method to apply texture

Select how to combine the drawn line with the texture selected in [Texture]. The result of the combine varies depending on the selected texture and hardness and the brush density.

Normal	Keeps the overall stroke density as much as possible.
Multiply	Multiplies the density of the texture by the density of the stroke.
Subtract	Subtracts the density of the texture.
Compare	Compares the density of the texture and that of the stroke and draws using the brighter one.
Outline	The texture outline is sharpened. The effect is visible around lines where the hardness of the brush is low.

(8) Apply by each plot

When turned on, texture is applied to the brush pattern (brush tip drawing) of the drawing tool. In this case, since the brush pattern overlaps in the central area of the stroke, the texture is also displayed overlapped.

When turned off, texture is applied on a stroke basis.

Brush size

Allows you to configure the tool size when using drawing-type tools or figure tools.

Important **Some settings may not display depending on the selected tool or sub tool.**

(1) Brush size

Configures the drawing size. A slider allows you to change the setting. You can also change the setting by using the up and down arrow icons next to the value box. The [Affected by] button allows you to select the settings of the tablet and the like which affect the drawing size.

For [Affected by], see "Effect source settings" .

(2) Specify by size on screen

Makes the tool size displayed on a scaled up/down canvas appear the same as when the canvas is displayed at 100%.

(3) At least 1 pixel

Makes the tool draw lines of at least 1 pixel when drawing thin lines using Starting and Ending by pen pressure, for example.

(4) Disarray *

When turned on, changes the brush size for each line when drawing with the [Stream line] tool or [Saturated line] tool. Configure the degree of variation in the brush size with an indicator or slider.

(5) Brush preview

Previews the brush shape by reflecting settings such as brush size and anti-aliasing.

C

Camera

Allows you to configure the camera angle for 3D materials and the like when you have a 3D material selected with the [Object] sub tool, for example.

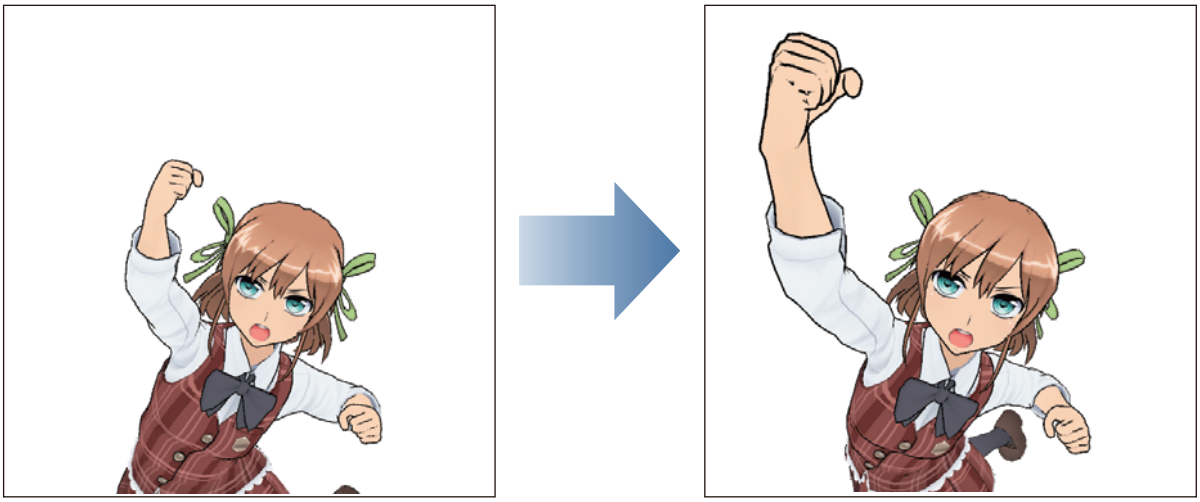
Memo **Settings in this category affect all 3D items included in the selected 3D layer.**

(1) Camera

Clicking [Preset] displays a list of camera angles. Select the desired camera angle to apply to the selected 3D material.

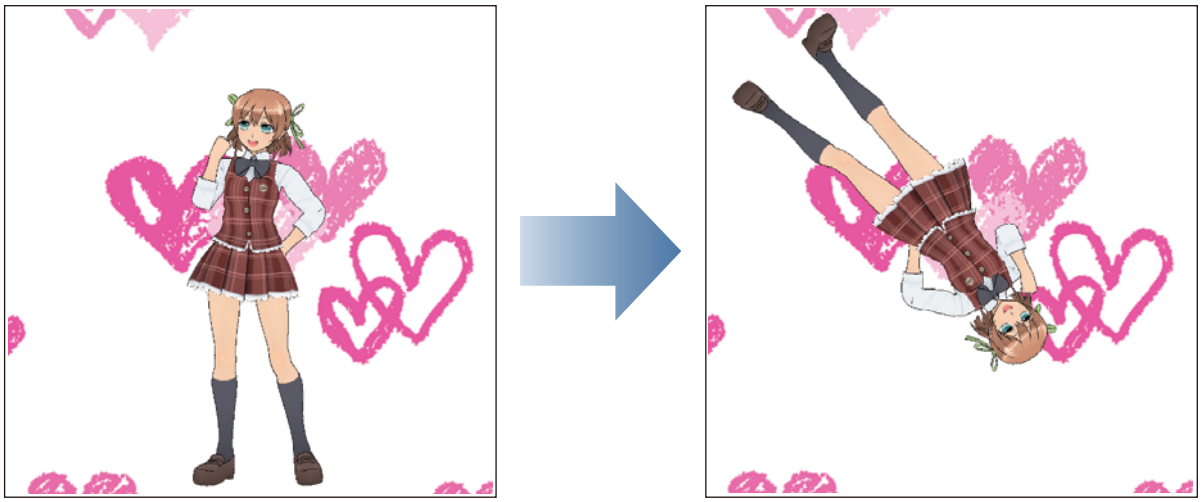
(2) Perspective

Adds perspective to the 3D material.



(3) Roll

Rotates the camera with its position fixed.

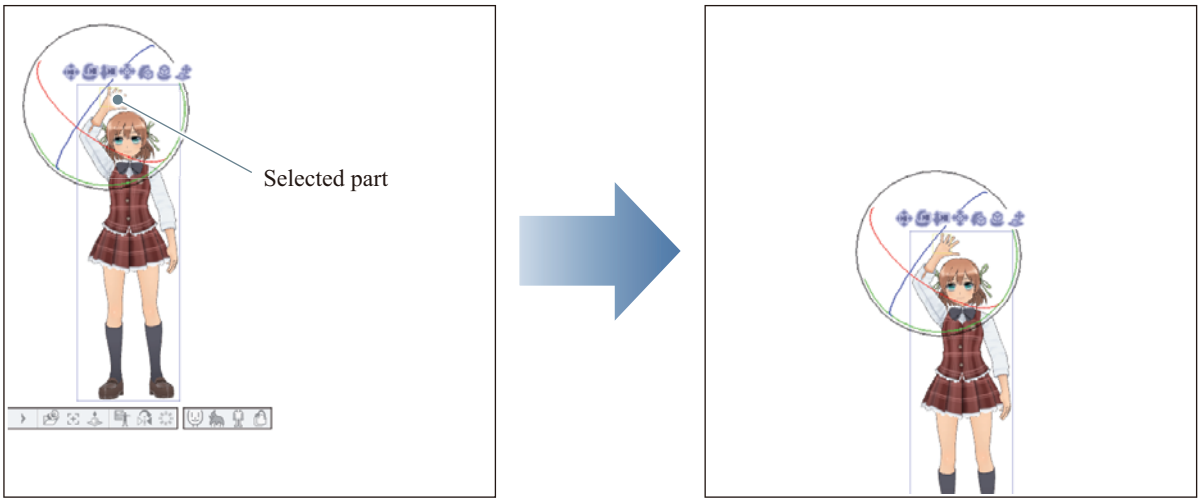


(4) Focus on editing target

Moves the camera in such a way that the selected 3D material is displayed in the center. When a 3D character material or a 3D pose model material is selected, the result of the operation may differ depending on the selection status.

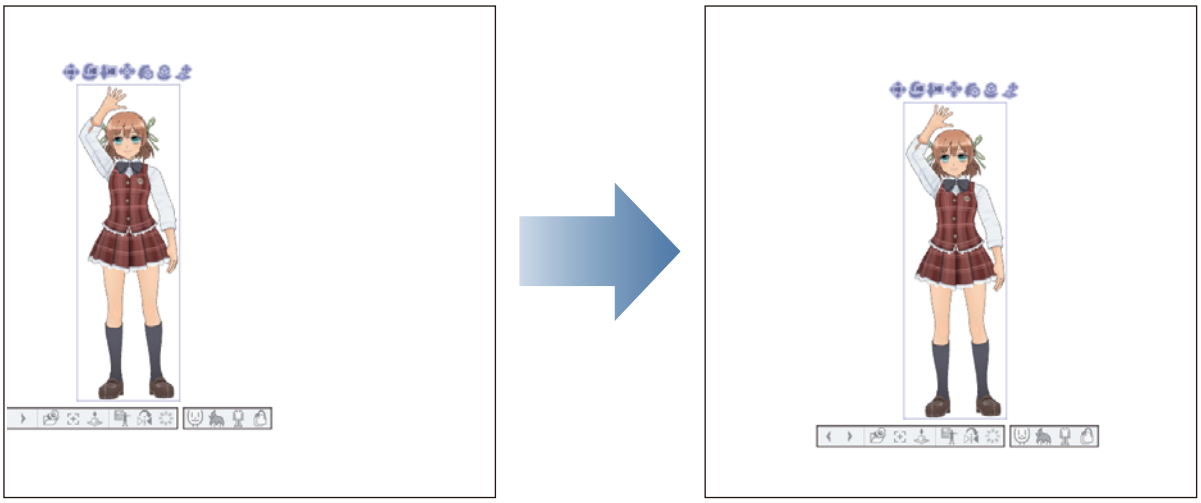
When a part is selected

Moves the camera in such a way that the selected part is displayed in the center.



When a part is not selected

Moves the camera in such a way that the selected 3D character material is displayed in the center.



Character

Allows you to configure facial expression, clothes, hair style and the like when you have a 3D character material selected with the [Object] sub tool, for example.

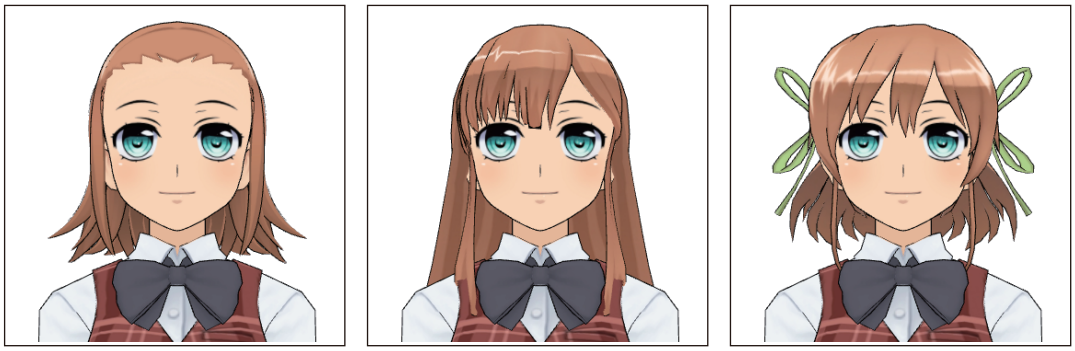
Important **The [Character] category does not display when a 3D pose model material is selected.**

(1) Face parts

Select a face part for the 3D character material from the list.

(2) Hair

Select a hair style for the 3D character material from preconfigured hair styles.

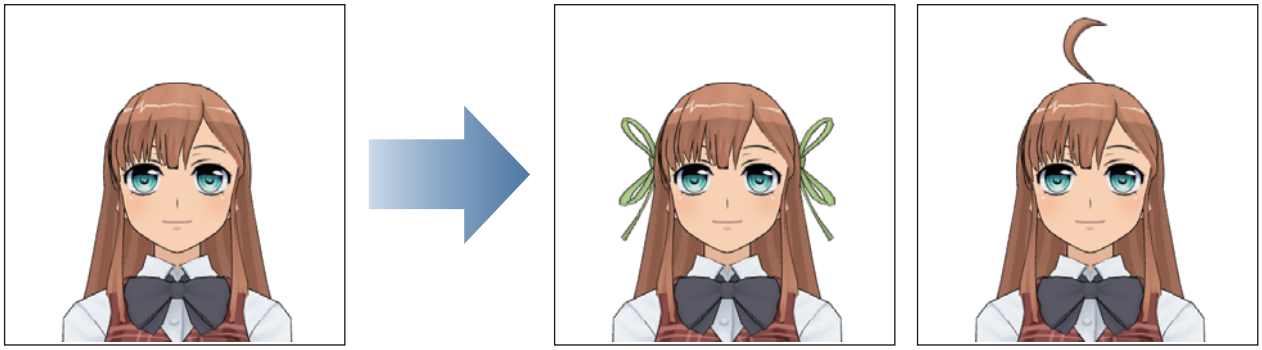


(3) Body

Select a body for the 3D character material from preconfigured bodies. Changing the body allows you to change the 3D character material's clothes.

(4) Accessories

Select the desired accessory(accessories) for the selected 3D character material to wear, such as a ribbon. You may select multiple items for Accessories.



(5) Settings of expression

Click to display a list of facial expressions for 3D character materials. Select the desired facial expression for the selected 3D character material.

(6) Expression in eyes

Click to change the eye expression.

Memo

[Expression in eyes] is available when eye expressions are configured in CLIP STUDIO COORDINATE (Japanese only) .

(7) Expression in mouth

Click to change the mouth expression.

Memo **[Expression in mouth] is available when mouth expressions are configured in CLIP STUDIO COORDINATE (Japanese only) .**

Closed area fill

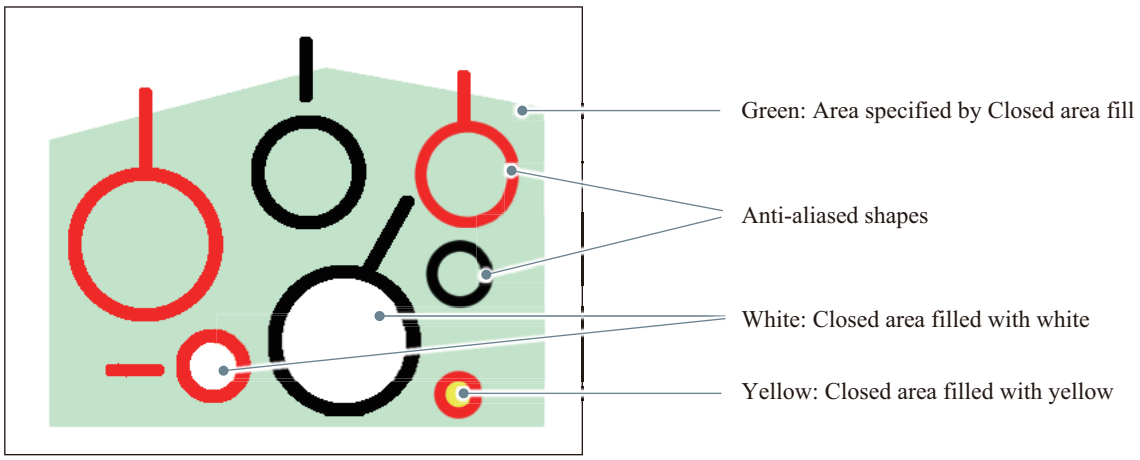
Allows you to configure how to fill in detail when using the [Close and fill] sub tool or [Paint unfilled area] sub tool. Allows you to configure the area to fill, reduce/expand the selected area, and so on.

Important **Closed area fill settings for a selected area are the same as for fill closed area. However, the output of closed are fill is a selection. The following describes each item using the Closed area fill as an example.**

(1) Target all colors

Refers to the specified color to decide whether or not to fill.

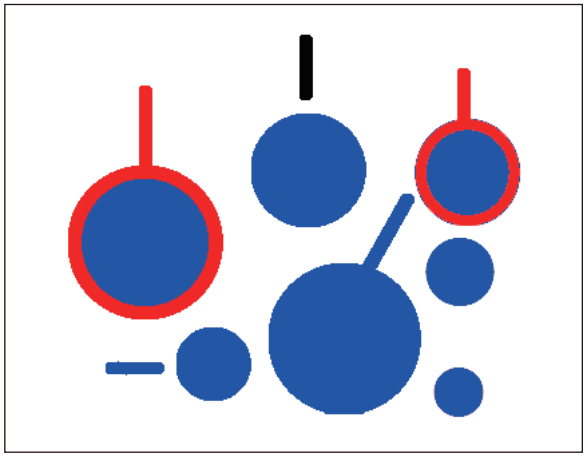
The effect of this item on fill will be described using the following figure as an example.


Green: Area specified by Closed area fill
Anti-aliased shapes
White: Closed area filled with white
Yellow: Closed area filled with yellow

Memo **Changing the [Target color] setting or adjusting the [Color margin] value may improve run over of the fill color.**

All colors

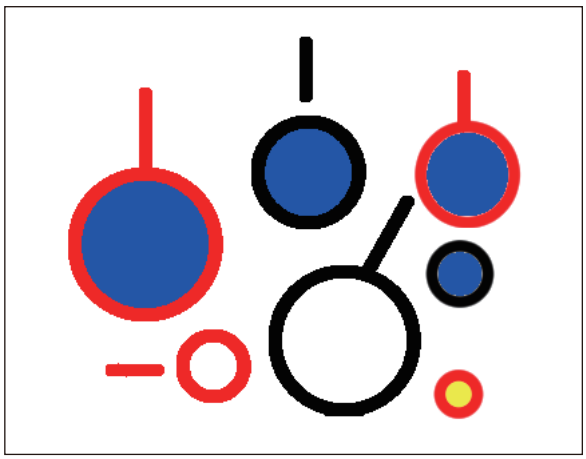
Fills closed areas of all colors.



Lines outside the specified area are not filled.

Only transparent part

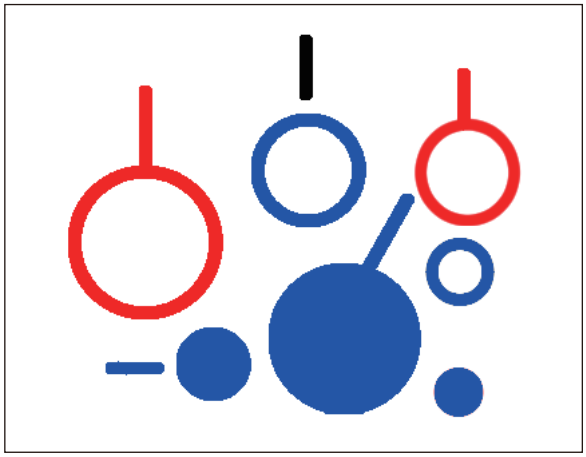
Fills transparent areas.



Closed areas that are transparent are filled.
Areas already filled with white and the like are not filled.

Area surrounded by transparent

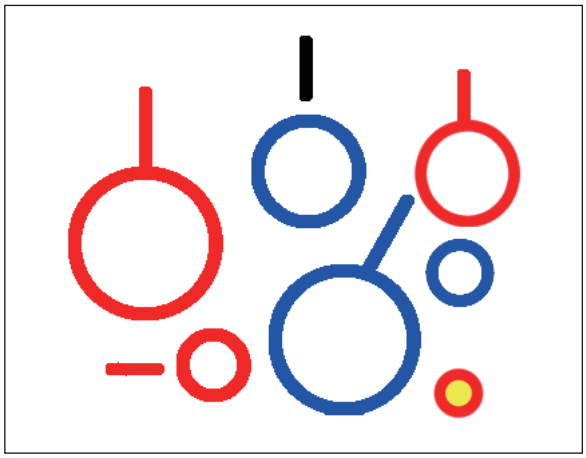
Fills areas surrounded by transparent.



Areas surrounded by transparent are filled.
Lines and shapes outside the specified area are not filled.

Black only

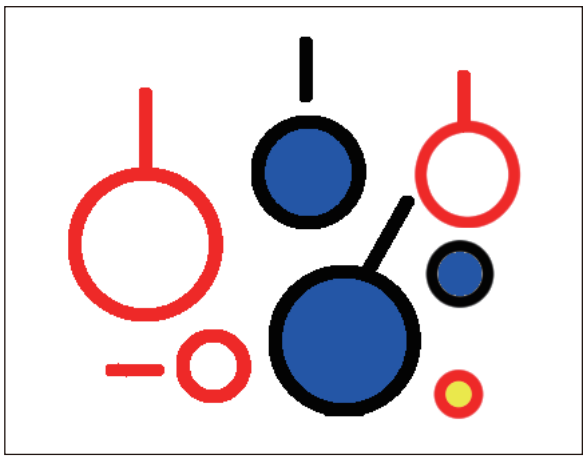
Fills areas drawn in black.



Blacks inside the specified area are filled.
Lines outside the specified area are not filled.

Area surrounded by black

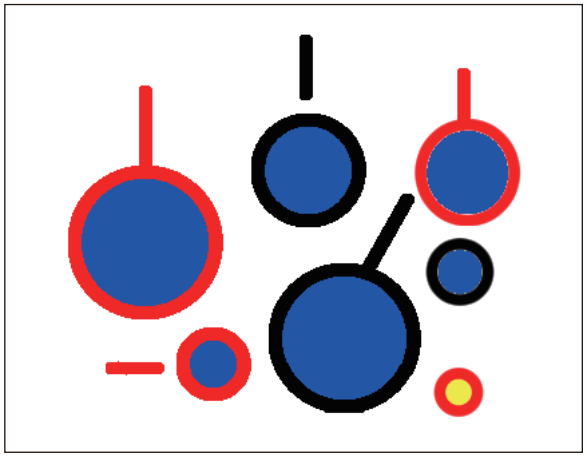
Fills areas surrounded by black.



Only areas enclosed in black within the specified area are filled.

Only white and transparent

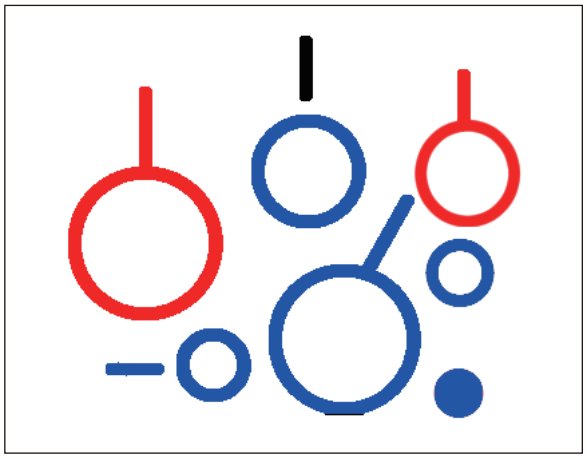
Fills areas drawn in white and transparent areas.



Closed areas in white or transparent are filled.

Area surrounded by white and transparent

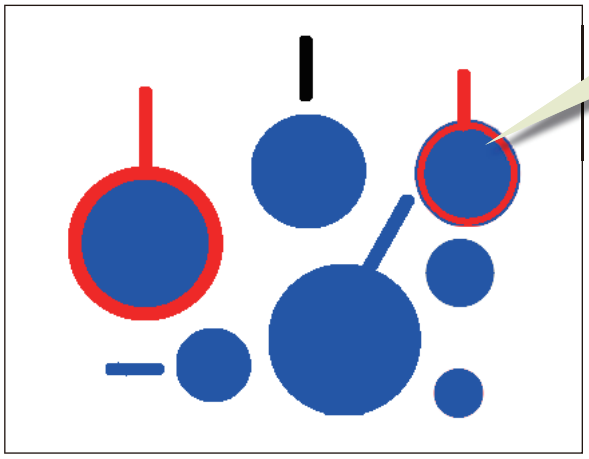
Fills areas surrounded by white and areas surrounded by transparent.

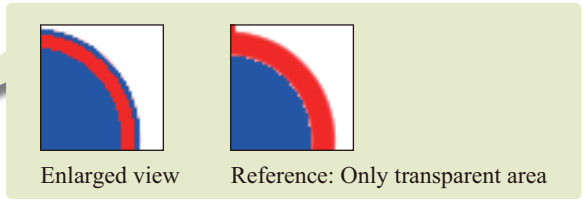


Areas surrounded by white or transparent are filled. Lines and shapes outside the specified area are not filled.

Treat pale transparent as transparent

Treats translucent areas created by anti-aliasing and the like as transparent to fill.

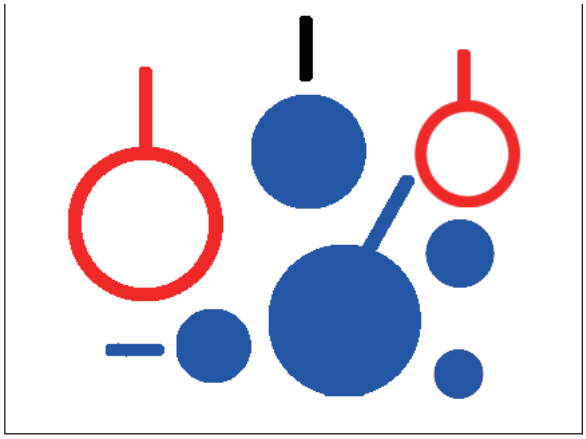




Areas of all colors are filled.
Selecting this item allows you to prevent unfilled pale, translucent areas created by anti-aliasing and the line.

Other than transparent and inner transparent

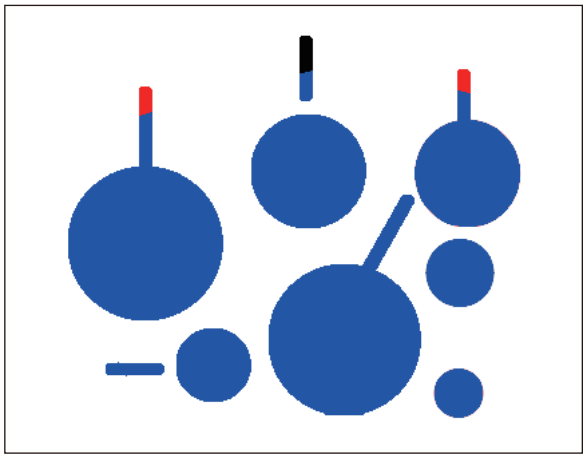
When the outer perimeter is completely included in the selected area, fills the inside of the outer perimeter.



Shapes, including lines inside the specified area are filled.
Lines and shapes outside the specified area are not filled.

Apply open area too other than transparent

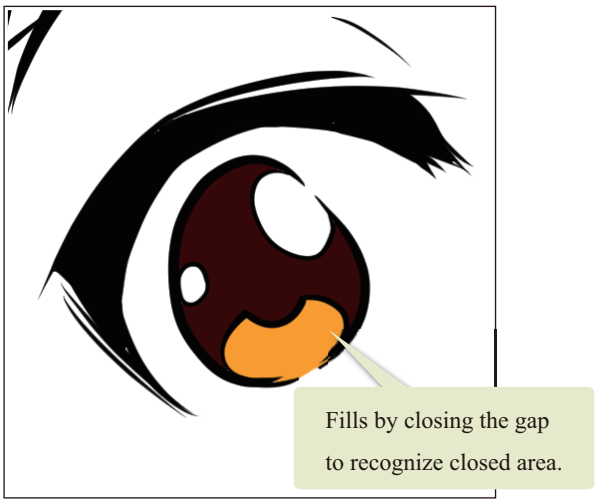
Fills drawn lines and transparent areas enclosed by drawn lines.



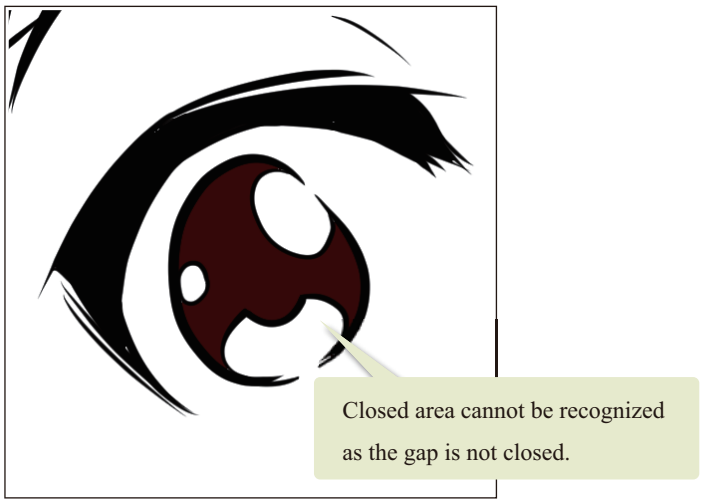
Drawn lines and transparent areas enclosed by drawn lines inside the selected area are filled.
Areas outside the specified area are not filled.

(2) Close gap

When gaps are present in the area to fill, fills by closing gaps up to a specified number of pixels. The indicator or slider on the right allows you to specify the size of the gap.



Close gap: ON



Close gap: OFF

(3) Color margin

Specifies the color margin (tolerance) to recognize an area as the same when filling. The larger the value the larger will be the tolerance to include areas in other colors than the target.

(4) Area scaling

Enlarges or reduces the area to fill by the number of specified pixels.

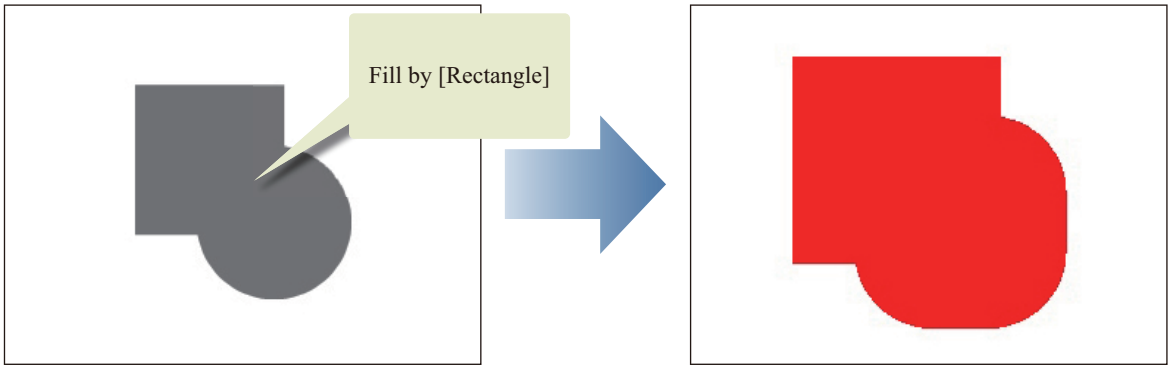
(5) Zoom method

Configures the shape of corners of the scaled area when [Area scaling] is turned on.

Rectangle

Determines the area by placing a rectangle on each pixel on the outline of the area to enlarge or reduce.

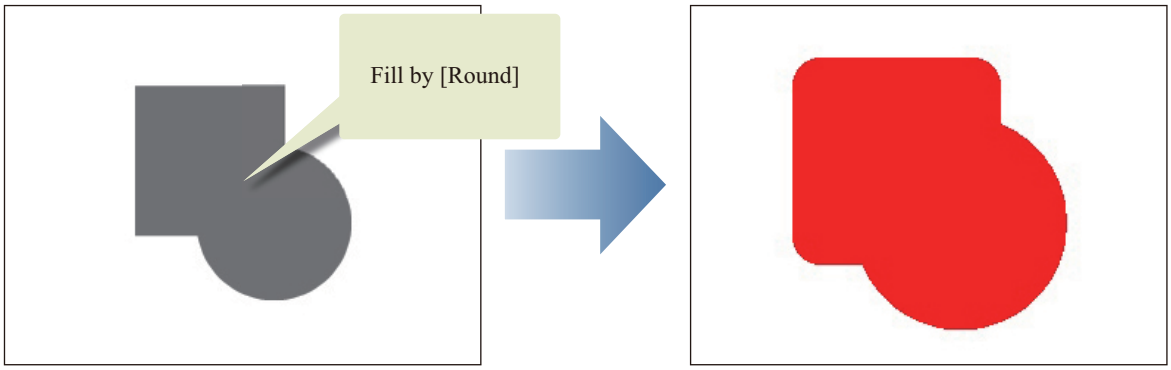
The outline of the enlarged or reduced area often becomes rectangular.



Round

Determines the area by placing a circle on each pixel on the outline of the area to enlarge or reduce.

The outline of the enlarged or reduced area becomes round as angles are rounded off.



To darkest pixel

Recognizes the area of the line with the darkest color and fills up to that area. If configured when enlarging the area with [Area scaling], it will prevent runovers to the outside of line pixels with maximum opacity.

When OFF

When ON

Continuous curve

Allows you to configure how to draw a curve, the angle step for rotation and the like when using tools or sub tools for drawing continuous curves.

Important **Some settings may not display depending on the selected tool or sub tool.**

(1) Line/Fill

Select whether to draw the figure using only lines or paint.

Create fill	Fills with drawing color the closed area in the figure. No outline is drawn for the figure.
Create line	Draws the figure using only lines.
Create both line and fill	Draws the outline of the figure and fills the closed area. The drawing colors for the outline and the closed area can be specified by [Line color] and [Fill color].

Important **[Line/Fill] is not available for [Vector] layers.**

(2) Line color

Specifies the color for the lines.

Main color	Configures the main drawing color as line color.
Sub color	Configures the sub drawing color as line color.
User color	Configures the color specified by the user as line color. Selecting a color with a color palette, eye dropper and the like, and clicking the icon allows you to configure the color. The configured color is not affected by changes in the main drawing color and sub drawing color, even when changed before the line is drawn.
Select user color	Displays the dialog box for selecting a color. This item does not display as icon.

(3) Fill color

Specifies the color for filling the figure.

Main color	The fill color is the main drawing color.
Sub color	The fill color is the sub drawing color.
User color	The fill color is that specified by the user. Selecting a color with a color palette, eye dropper and the like, and clicking the icon allows you to configure the color. The configured color is not affected by changes in the main drawing color and sub drawing color, even when changed before the line is drawn.
Select user color	Displays the dialog box for selecting a color. This item does not display as icon.

(4) Curve

Specifies how to create a selection area. Select from [Linear], [Spline], [Quadratic Bezier] and [Cubic Bezier]. For how to draw, see "Drawing Continuous Curves" .

(5) Close line

Connects the starting point and end point to create a closed curve.

(6) How to specify

Configures how to specify control points when [Cubic Bezier] is selected for [Curve]. Select from [By click] and [By drag].

Memo

How a line is drawn varies depending on the [How to specify] setting. For details, see "Drawing a Line Using [Cubic Bezier]" .

(7) Step of angle

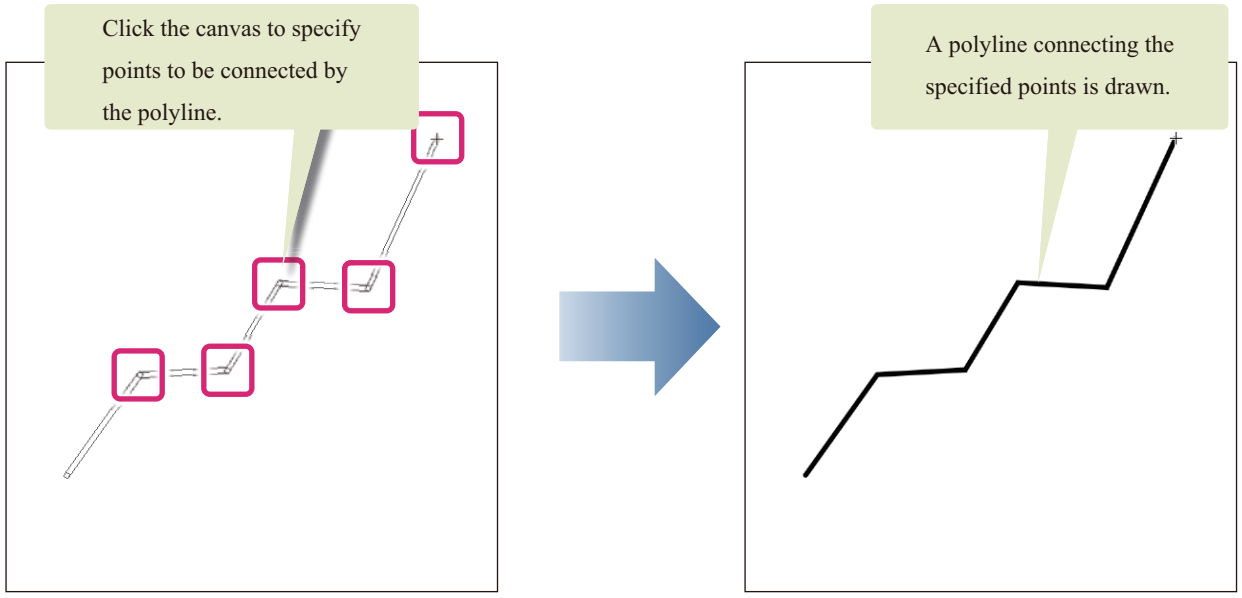
Configures the angle by which the polyline bends each time. Lines are created by connecting segments that bend by the configured angle step.

Drawing Continuous Curves

To draw continuous curves, select the drawing method for the [Continuous curve] tool from [Curve] on the [Sub tool detail] palette. The following describes how to draw continuous curves for each drawing method.

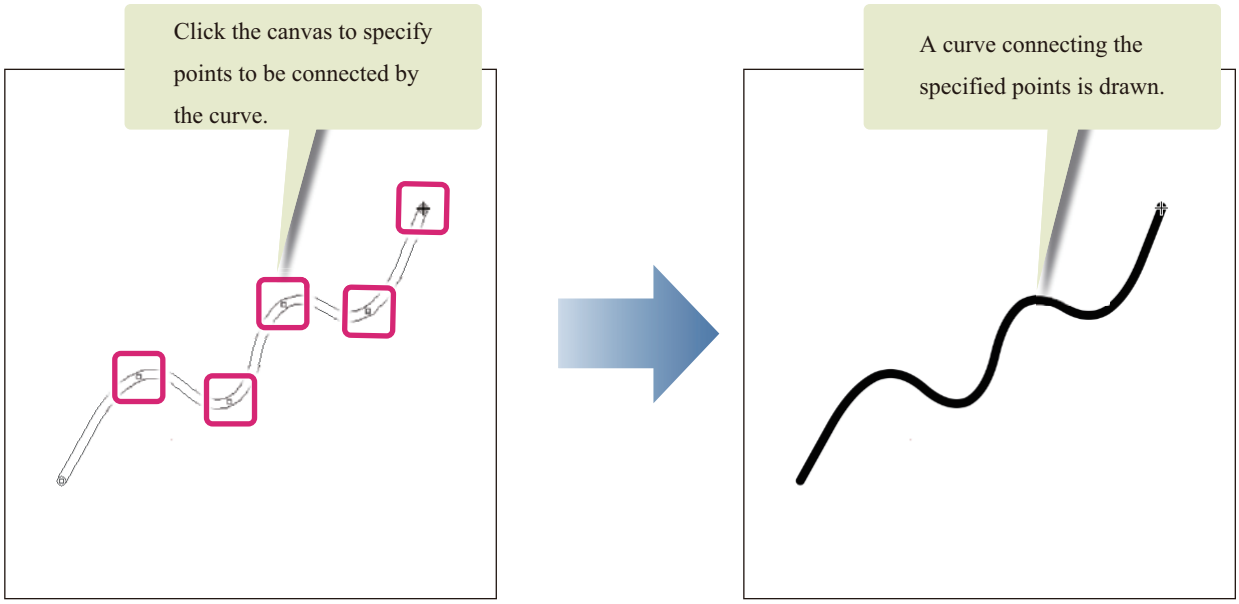
Drawing a Line Using [Linear]

Specify the points that will be connected by the polyline. Double click to commit the drawn line.



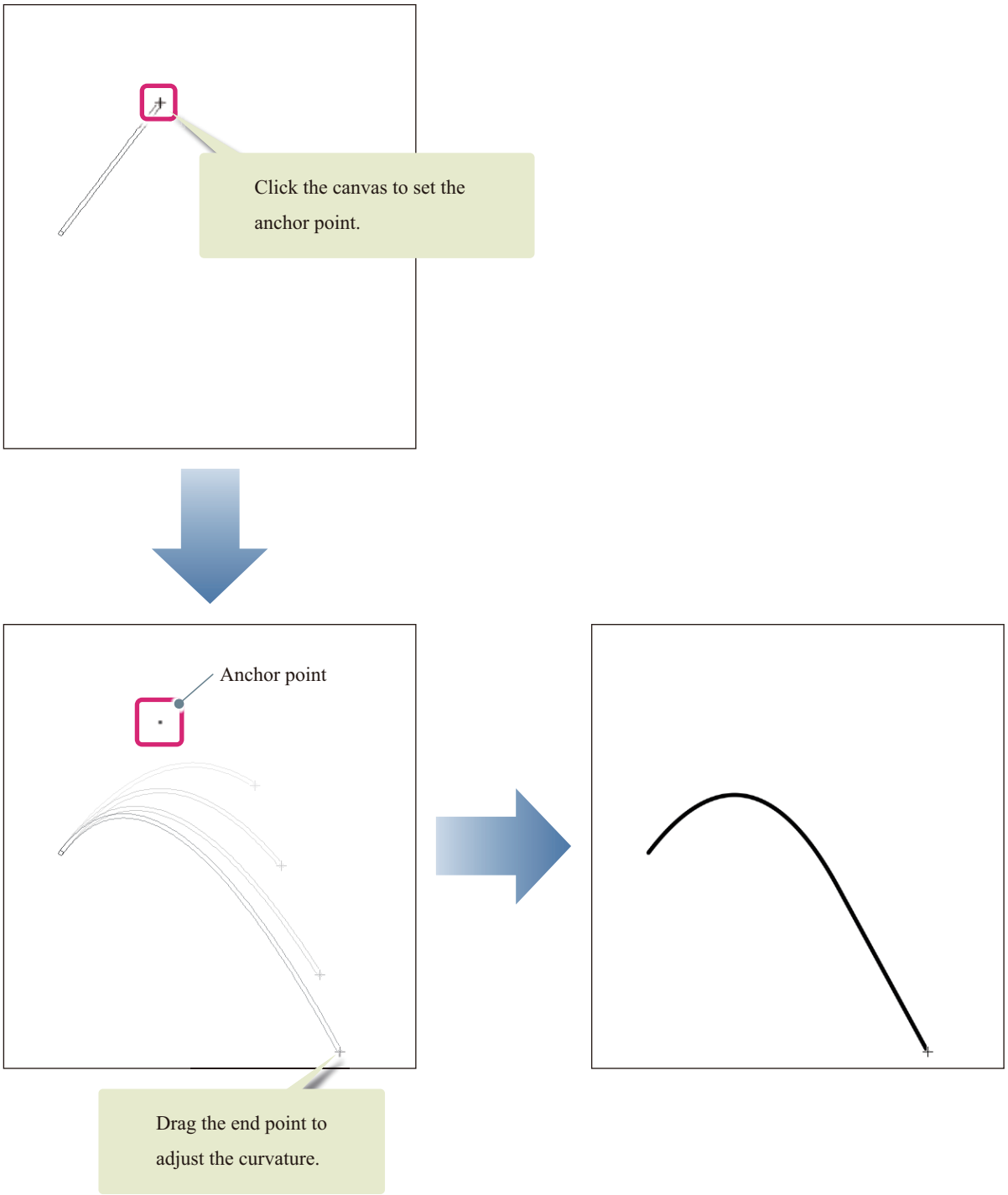
Drawing a Line Using [Spline]

Specify the points that will be connected by the curve. Double click to commit the drawn line.



Drawing a Line Using [Quadratic Bezier]

Specify multiple points to be connected by the curve. Click the canvas to set an [Anchor point]. Drag the end point to draw a curve as if it were dragged by the [Anchor point]. Double click to commit the drawn line.

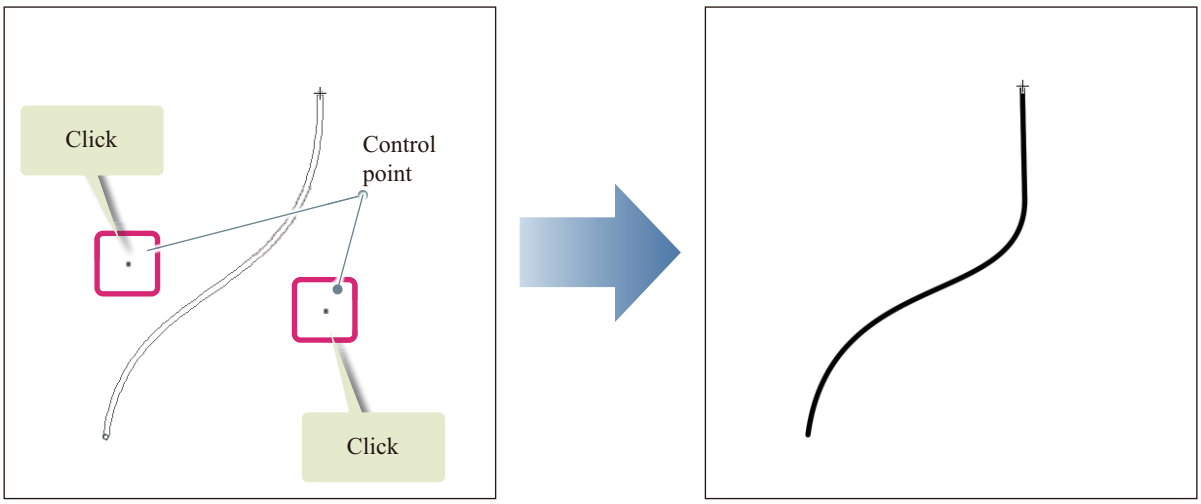


Drawing a Line Using [Cubic Bezier]

When drawing a line with [Cubic Bezier], how it is drawn depends on the [How to specify] setting on the [Sub tool detail] palette.

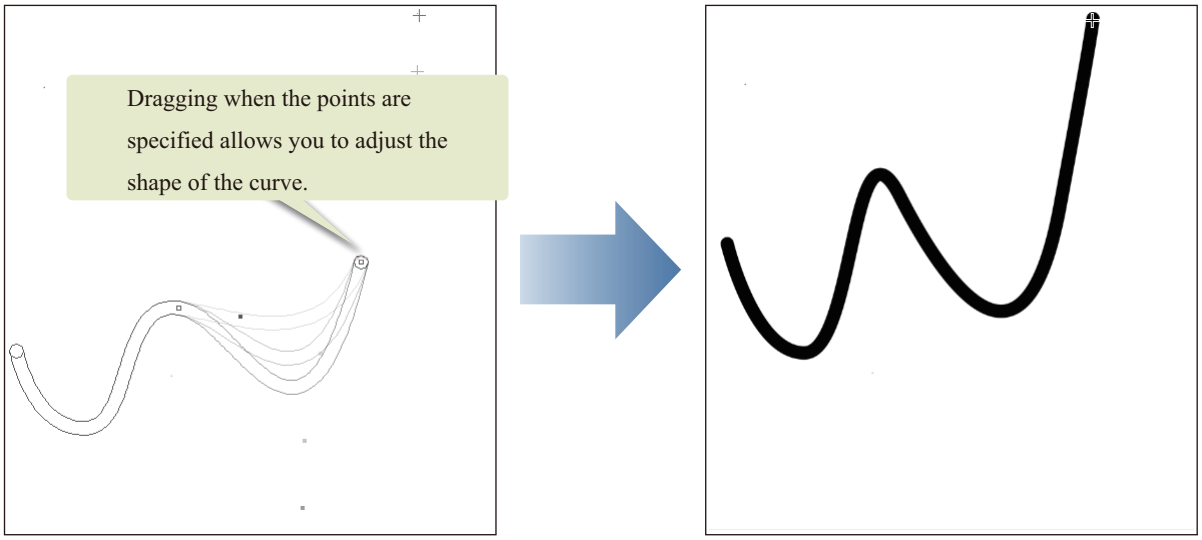
When [How to specify] is [By click]

Click the canvas to specify the control points. The curve is determined based on the location of the control points. Double click to commit the drawn line.



When [How to specify] is [By drag]

Specify the points to be connected by the curve by clicking on the canvas and drag the mouse. The control points move and adjust the curve. Double click to commit the drawn line.



Control point

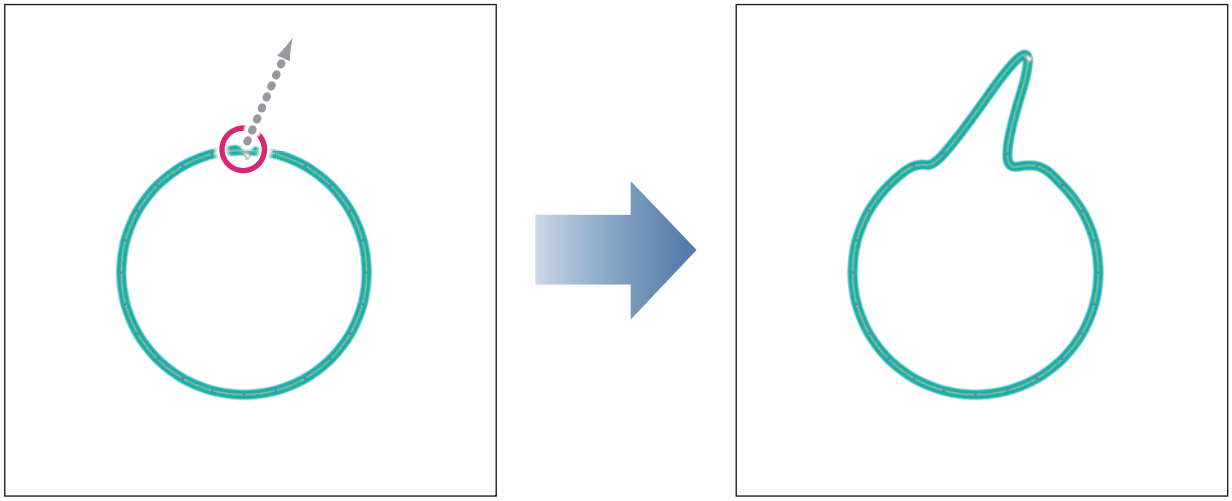
Allows you to configure control points on a drawn line when a [Vector] layer or [Balloon] layer is selected with the [Control point] sub tool and the like.

(1) Content of process

Configures how to edit control points. Allows you to move, add, delete, switch corners, change the line width and density, and so on.

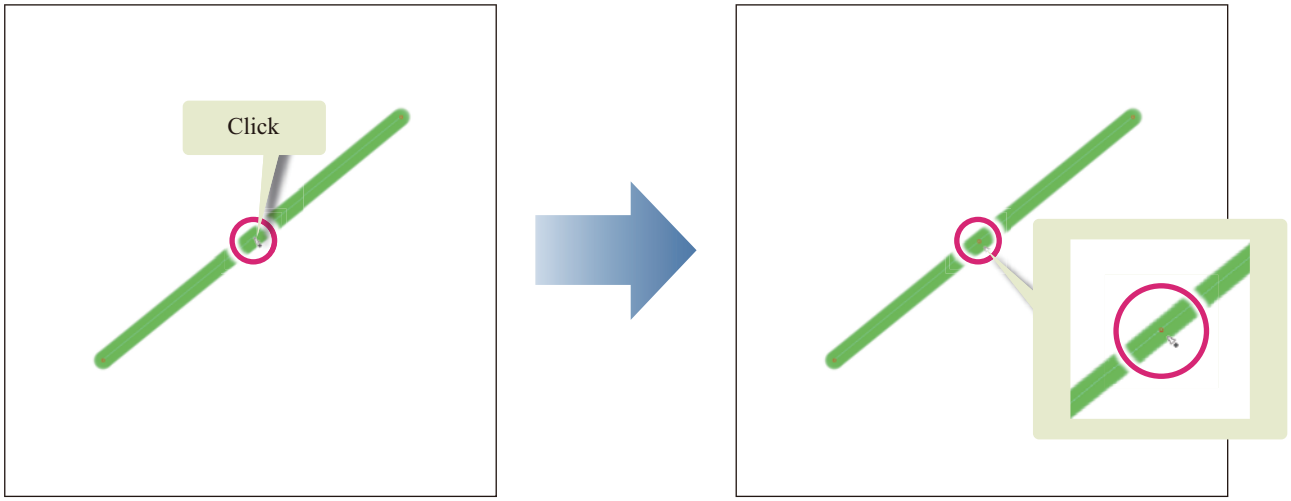
Move control point

Dragging a control point allows you to transform the shape of the line near the control point.



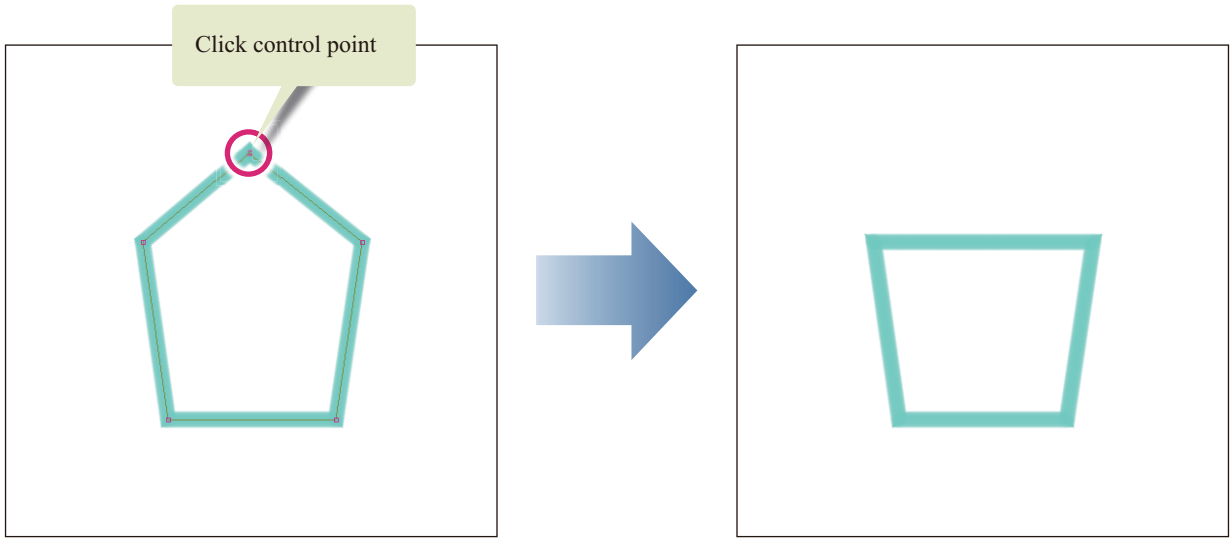
Add control point

Clicking on the line allows you to add a control point. Furthermore, dragging the control point allows you to transform the shape of the line near the control point.



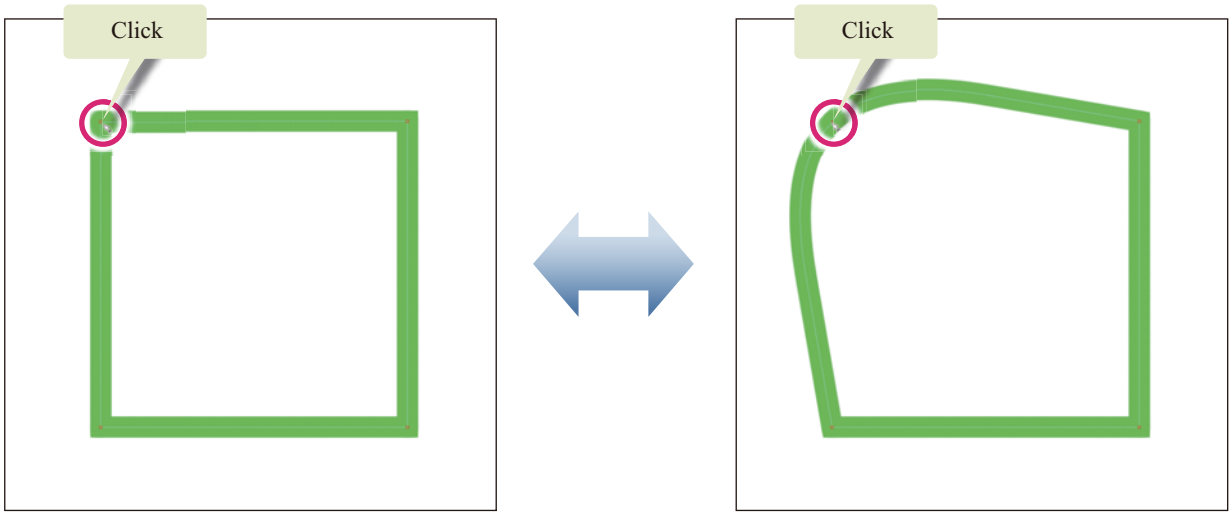
Delete control point

Clicking a control point allows you to delete it.



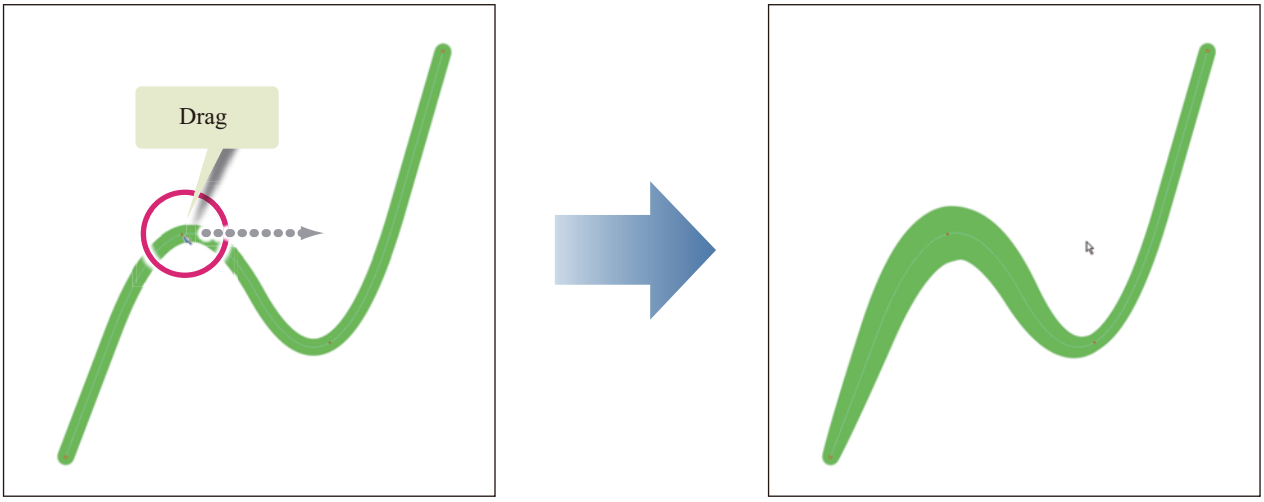
Switch corner

Clicking a control point allows you to switch the type of corner at the clicked point. The corner toggles between angled corner and round corner on each click.

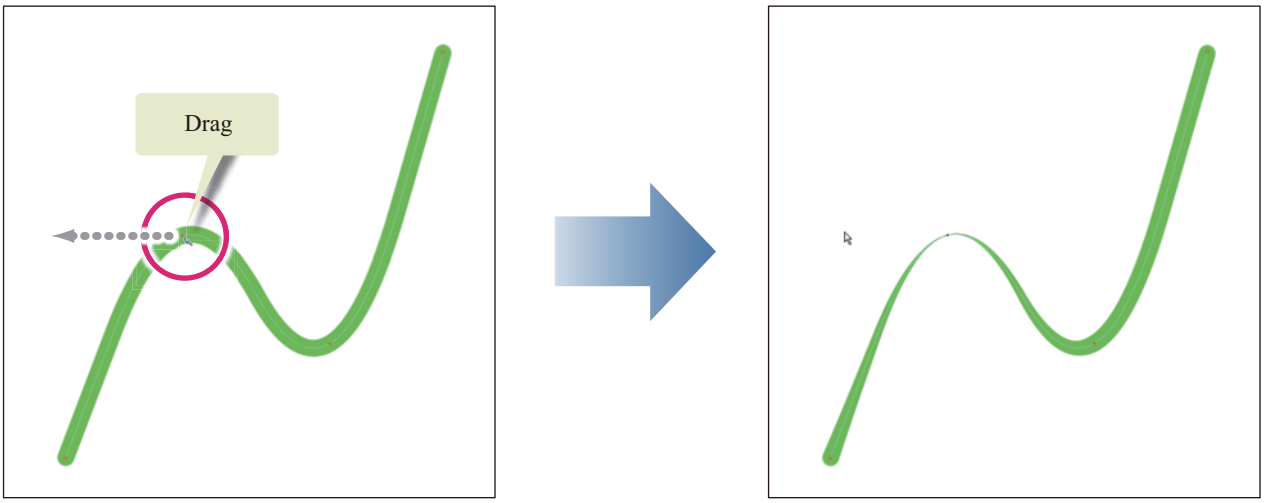


Correct line width

Dragging a control point allows you to change the width of the line near the control point.



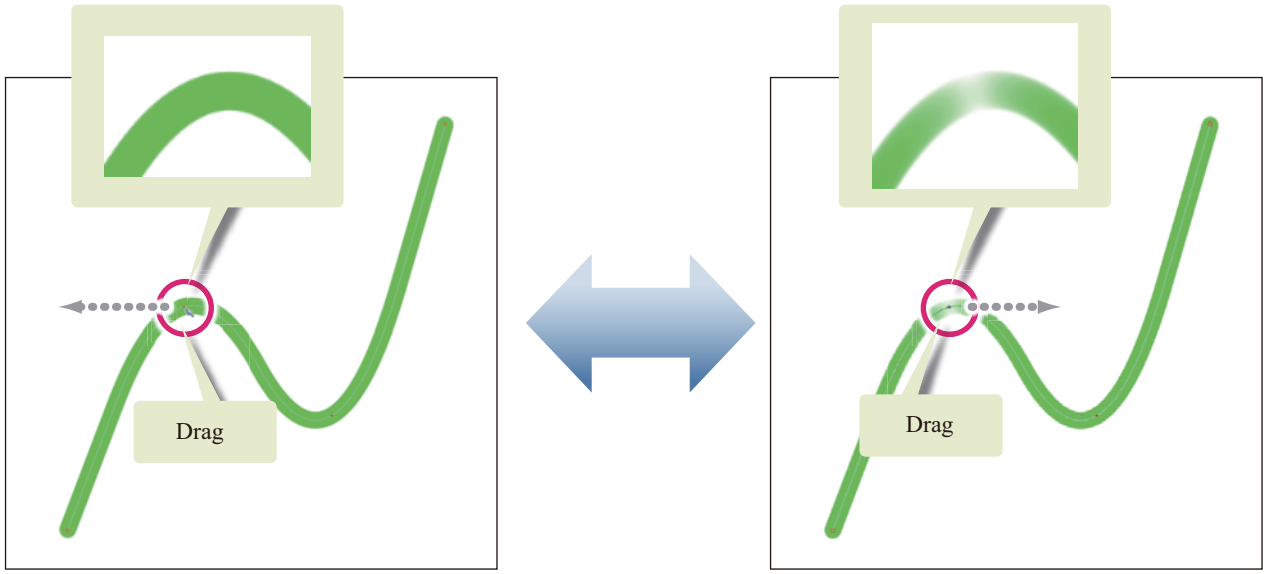
Correct line width (Thicker)



Correct line width (Thinner)

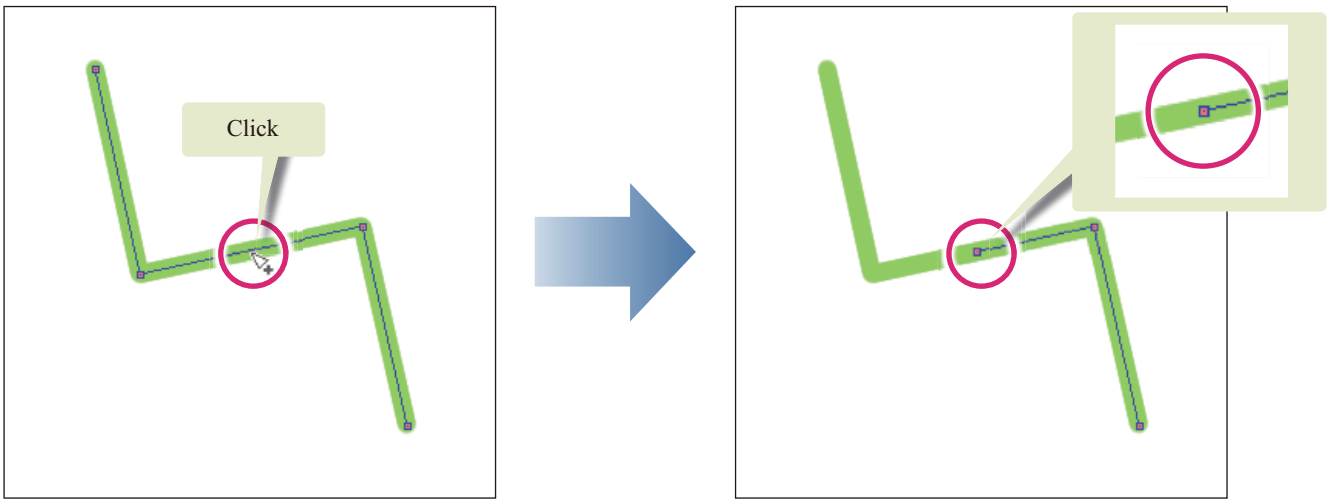
Correct density

Dragging a control point allows you to change the density of the line near the control point.



Cut line

Clicking on a line, cuts the line by the clicked point.



(2) All layers

When turned on, allows you to operate all lines drawn on all displayed vector/balloon/frame border/ruler layers. Clicking a line drawn on another layer switches the edited layer.

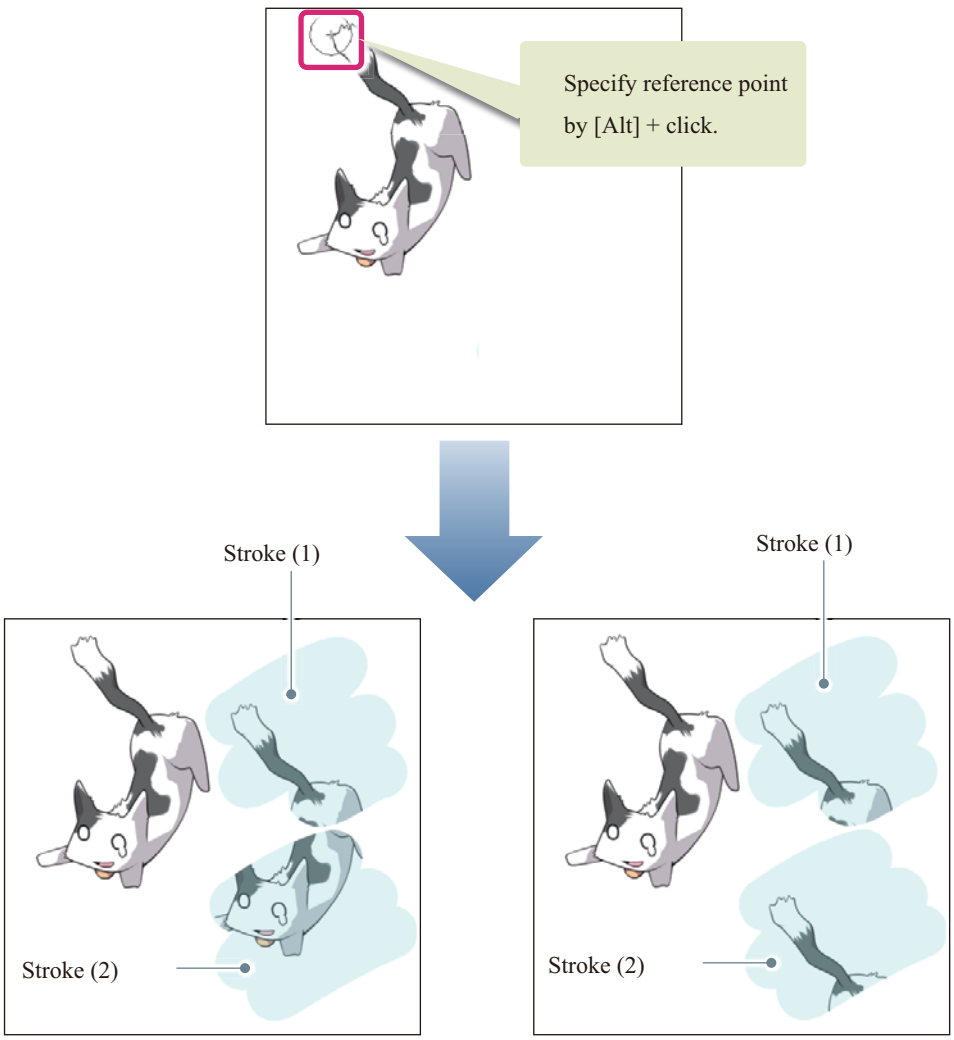
When turned off, operation is enabled only for lines drawn on the vector/balloon/frame border/ruler layer being edited.

Copy stamp

Allows you configure how to refer to an image when the [Copy stamp] sub tool is selected.

(1) Adjust reference position each time

When turned on, the image is drawn by keeping constant the relative position from the reference point. The position does not change even when the stroke changes. When turned off, the image is drawn by referring to the reference point each time the stroke changes.



Adjust reference position each time: ON
Relative position from reference does not change even when the stroke changes.

Adjust reference position each time: OFF
Image is drawn by referring to the reference each time the stroke changes.

(2) Mode for specifying reference position

When turned on, the mode changes to reference point specification mode, where the clicked point becomes the reference point. When drawing, be sure to turn off [Mode for specifying reference position]. You will not be able to draw if it is turned on.

Correction

Allows you to configure how to correct a pen touch.

Important **Some settings may not display depending on the selected tool or sub tool.**

(1) Make corner pointed

When turned on, drawing a line with corners makes the corners pointed.

(2) Stabilization

Configures stabilization of lines drawn on the tablet. The larger the value, the smoother will be the line and the smaller the value, the closer will be to the input.

(3) Correct by speed

Configures stabilization of lines drawn on the tablet. When turned on, the faster the pen is moved, the more corrected will be the line. When turned off, the line will follow the pen with little delay even when the pen is moved fast and mainly jitters as a result of slow pen speed will be corrected.

(4) Post correction

Toggles post correction on and off, and adjusts the strength of post correction. Post correction is a correction made after a line is drawn. Smooths the line after it is stabilized.

Memo **When working with vector layers, the larger the value for [Post correction], the less will be the number of control points.**

(5) Adjust by speed

Adjusts the strength of [Post correction] by the speed of the stroke.

(6) Adjust by display ratio

Adjusts the strength of [Post correction] by the display ratio of the canvas.

(7) Bezier curve

When turned on, the line after post correction becomes a quadratic Bezier curve. When turned off, the line after post correction becomes a spline curve.

Memo

- **When [Bezier curve] is turned on, line correction becomes similar to that used in Manga Studio 4.0 or Illust-Studio.**
- **Selecting a line drawn on a vector layer using the [Object] sub tool or [Control point] sub tool when [Bezier curve] is turned on displays the anchor points on the [Bezier curve].**

(8) Brush stroke

Changes the length by which a line is continued when drawn by gradually decreasing the pen pressure.

When the value is large, the line follows the pen by becoming thinner even after the pen is released from the tablet as if it were drawn with a brush with long tip.

(9) Possible to snap

When turned on, drawing snaps to a ruler. Snap to ruler can be toggled on/off only for certain sub tools.

Memo **When using a drawing-type tool, snap to special ruler other than guide is not possible.**

(10) Vector Magnet

When turned on, drawing on a vector layer snaps the drawing to a line drawn before. Depending on the type of line, lines are consolidated into one. An indicator or slider allows you to adjust the strength of the snap.

(11) Snap to basic frame

When turned on, drawing a figure and the like snaps it to the basic frame.

Correct line width

Allows you to configure how to increase or reduce line width when a [Vector] layer or [Balloon] layer is selected with the [Correct line width] sub tool.

(1) Thicken width

Adds the numerically specified line width to the current line width.

(2) Thin width

Subtracts the numerically specified line width from the current line width.

(3) Leave a line of 1 pixel

Leaves only the central one-pixel line without erasing the line when setting [Thin width] to [Raster] layer.

(4) Scale up width

Specifies scale up as a ratio of the current line width.

(5) Scale down width

Specifies scale down as a ratio of the current line width.

(6) Fix width

Changes the line width to the specified value.

(7) Process whole line

When turned on, clicking a point on the line applies [Correct line width] to the entire line.

Create Balloon

Allows you to configure how to create a layer when creating a [Balloon] layer with a tool or sub tool for creating a balloon.

(1) Line/Fill

Configure whether to draw the balloon's line and/or fill the balloon.

Create fill	Fills the balloon's ground. No outline is drawn for the balloon.
Create line	Draws the balloon using only outline.
Create both line and fill	Draws the balloon's outline and fills the ground. The drawing colors for the outline and ground can be specified by [Line color] and [Fill color].

(2) Line color

Specify the color for the balloon's line. This setting is available when [Create both line and fill] is selected for [Line/Fill].

Main color	Configures the main drawing color as line color.
Sub color	Configures the sub drawing color as line color.
User color	Configures the color specified by the user as line color. Selecting a color with a color palette, eye dropper and the like, and clicking the icon allows you to configure the color. The configured color is not affected by changes in the main drawing color and sub drawing color, even when changed before the line is drawn.
Select user color	Displays the dialog box for selecting a color. This item does not display as icon.

(3) Fill color

Configure the color for painting the inside of the balloon. This setting is available when [Create both line and fill] is selected for [Line/Fill].

Main color	Configures the main drawing color as the color for painting the inside of the balloon.
Sub color	Configures the sub drawing color as the color for painting the inside of the balloon.
User color	Configures the color specified by the user as the color for painting the inside of the balloon. Selecting a color with a color palette, eye dropper and the like, and clicking the icon allows you to configure the color. The configured color is not affected by changes in the main drawing color and sub drawing color, even when changed before the line is drawn.
Select user color	Displays the dialog box for selecting a color. This item does not display as icon.

(4) Opacity of painting

Configures the opacity of the color for painting the inside of the balloon.

(5) How to add

Configure how to create the balloon layer.

Memo

When the balloon is created in such a way that it overlaps with a text, the balloon is added to the layer including the text independently of what is configured in [How to add].

Create new layer	When a balloon is created, creates a new balloon layer.
Add to selected layer	If a balloon is created when a text layer or balloon layer is selected, the balloon is added to the selected layer.

(6) Tone

When turned on, the [Balloon] layer is created with the tone applied. Furthermore, the [Expression color] will be [Gray] and the [Drawing color], [Black] and [White] independently of the [Default expression color].

When turned off, the [Balloon] layer is created with [Expression color] configured to [Default expression color].

Memo

The [Default expression color] is configured on the [New] dialog box that displays when [File] menu → [New] is selected.

(7) Combine with the text in the drawing area *

When turned on, drawing a balloon in an area with text combines the drawn balloon layer with the text layer. Moving the balloon with the [Object] sub tool also moves the text along with it.

Create frame

Allows you to configure settings related to frame border drawing when using a sub tool that creates frame borders.

(1) Draw frame border

Draws border lines in the frame border folder.

(2) How to add

Configures the method to add frame folder.

Create a new folder	Add a new frame folder when drawing a frame.
Add to selected folder	If a frame folder or a layer in a frame folder is selected, add a frame to the selected frame folder. If a layer other than those is selected, add a new frame folder.

(3) Raster layer

When turned on at the time of creating the frame border, creates a [Raster] layer inside the frame border folder.

Memo

The expression color of the created [Raster] layer is the same as that configured in [Default expression color] on the [New] dialog box used when creating the canvas.

(4) Fill inside the frame *

When turned on at the time of creating the frame border, creates a white [Fill in monochrome] layer inside the frame border folder.

Create ruler

Allows you to configure how to create a ruler when using a tool or sub tool for creating a ruler.

(1) Create at editing layer

When turned on, the ruler is created on the layer being edited.

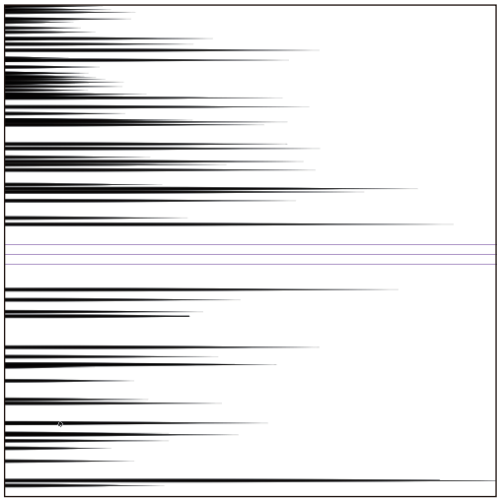
When turned off, a new layer for rulers is created. However, if a layer named "Ruler" is present, the ruler is created there.

Create special ruler

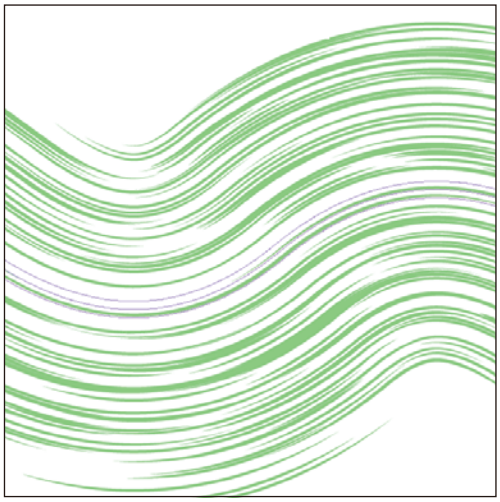
Allows you to configure the shape and how to create a special ruler when using the [Special ruler] sub tool.

(1) Special ruler

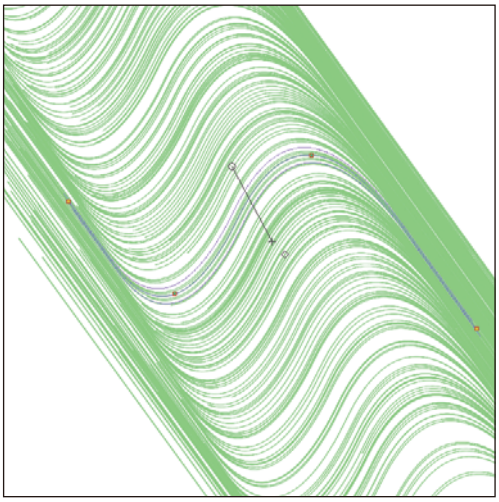
Selects the ruler shape. Select from [Parallel line], [Parallel curve line], [Multi-curve line], [Eradiation curve], [Concentric circle] and [Guide].



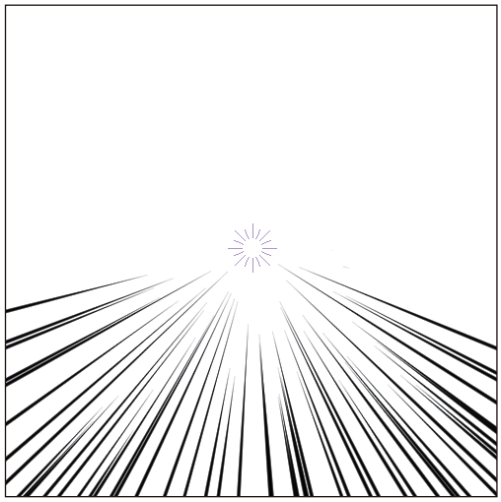
Parallel line ruler



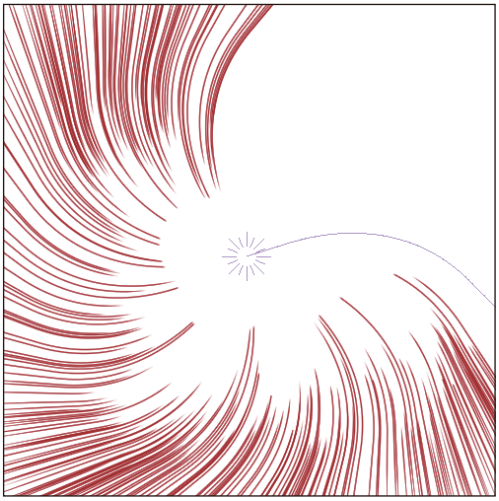
Parallel curve ruler



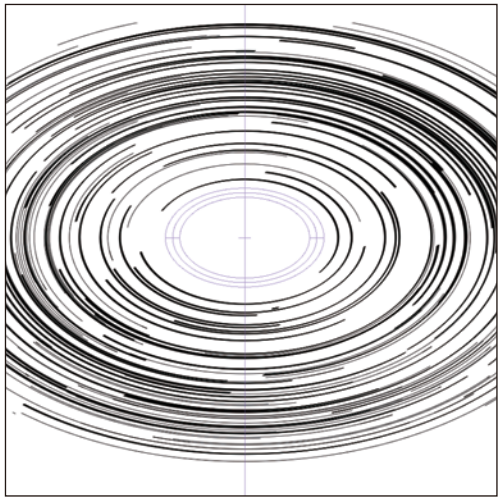
Multi-curve ruler



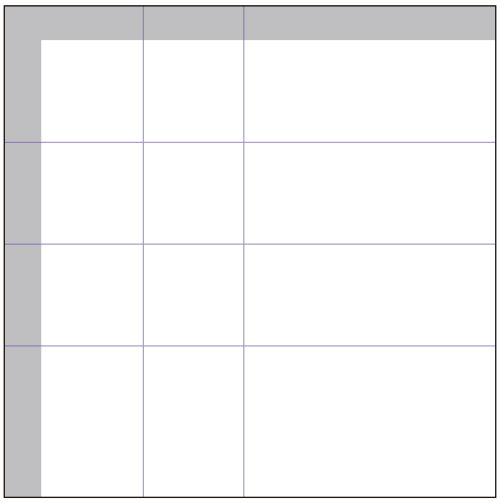
Eradiation line ruler



Eradiation curve ruler



Concentric circle ruler



Guide

(2) Curve

Specifies how to create a ruler curve. Select from [Linear], [Spline], or [Quadratic Bezier]. This can be set when [Parallel curve line], [Multi-curve line], or [Eradiation curve] is selected in [Special ruler].

Memo **For details on how to draw a curve, see "Drawing Continuous Curves" .**

(3) Fixed aspect

When turned on, fixes the aspect ratio when creating a ruler. This setting is available when [Concentric circle] is selected for [Special ruler].

(4) Horizontal

Configures the width ratio when [Aspect type] is turned on.

(5) Vertical

Configures the height ratio when [Aspect type] is turned on.

(6) Adjust angle after fixed

When turned on, rotates the ruler after its size is fixed. This setting is available when [Concentric circle] is selected for [Special ruler].

(7) Step of angle

Allows you to configure the angle by which the ruler will rotate when [Adjust angle after fixed] is turned on, or [Parallel line] is selected for [Special ruler].

(8) Create at editing layer

When turned on, the ruler is created on the layer being edited.

When turned off, a new layer for rulers is created. When creating a [Guide], if a layer named "Guide" is present, the guide is created there.

Create symmetrical ruler

Allows you to configure the number of the lines of a symmetrical ruler and how to make it symmetric when using the [Symmetrical ruler] sub tool.

(1) Number of lines

Configures the number of lines which can be drawn concurrently when drawing by snapping to the symmetrical ruler.

(2) Line symmetry

When turned on, the line symmetry ruler is created. When turned off, the rotation symmetry ruler is created.

(3) Step of angle

Allows you to configure the angle by which the object will rotate each time.

(4) Create at editing layer

When turned on, the ruler is created in the layer being edited. When turned off, a new layer for rulers is created.

Curve by step

Allows you to configure how to draw a line, the angle step for rotation and the like when using asub tool to divide frame borders, such as the [Curve] sub tool.

(1) Curve

Specifies how to draw the curve. Select from [Linear], [Quadratic Bezier] and [Cubic Bezier].

Memo

For details on how to draw each curve, see "Drawing Continuous Curves" .

(2) Step of angle

Configures the angle by which the line will bend each time. Lines are drawn by connecting segments that bend by the configured angle step.

Cut frame border *

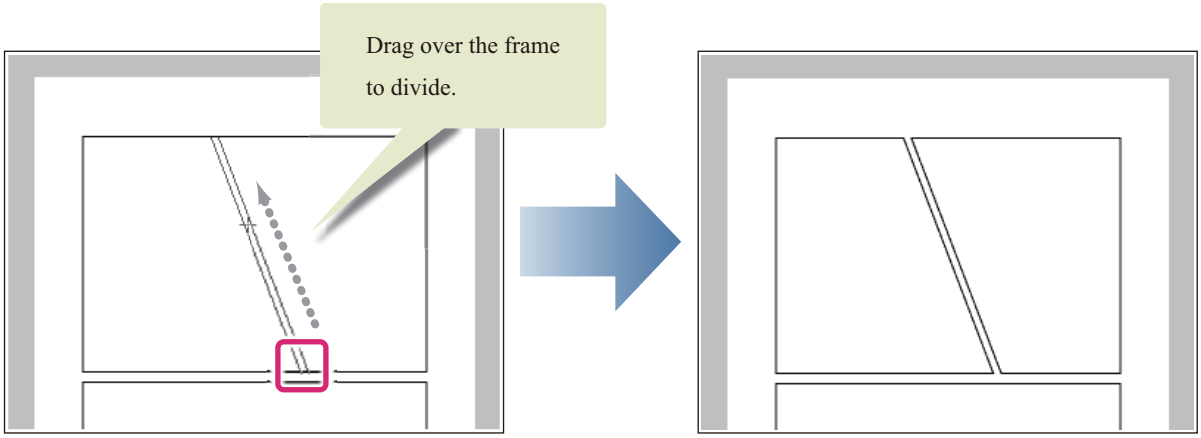
Allows you to configure how to divide frame borders when using a sub-tool to divide frame borders such as the [Divide frame folder] sub-tool.

(1) Shape of division

Configure the shape and method for dividing when dividing a frame border.

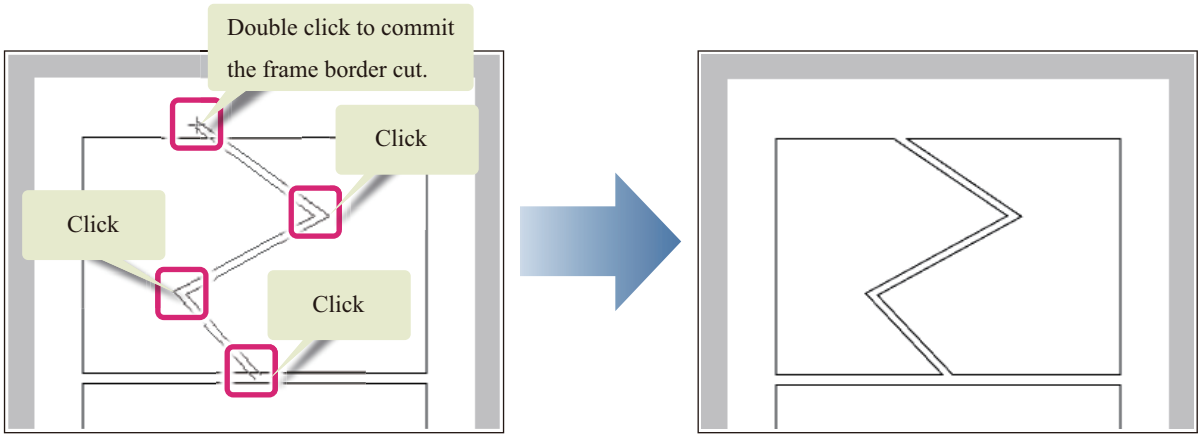
Divide by straigh line

Divides the frame border using a straight line. To divide, drag over the frame to divide.



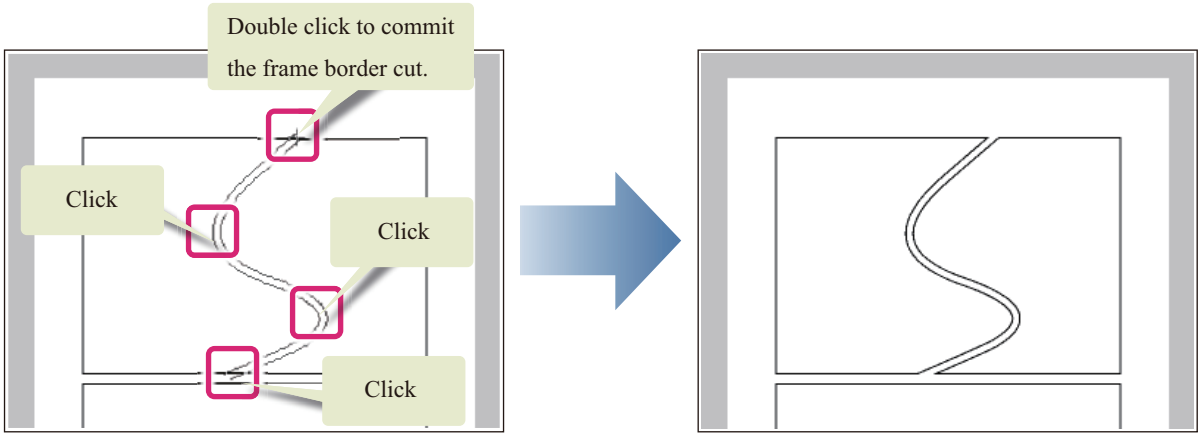
Divide by polyline

Divides the frame border using a polyline. Click the points where you want to place corners and commit the frame border cut by double clicking.



Divide by spline

Divides the frame border using a spline curve. Click the points to be connected by the curve and commit the frame border cut by double clicking.



(2) Step of angle

Configures the angle by which the line will bend each time. When turned on, divides the frame border with a line that bends by the configured angle.

(3) Dividing method

Configures how to divide the layer folder when the frame border is divided.?

Divide frame folder and duplicate inside layer	Creates as many new frame border folders as divided frame borders. Each frame border folder includes a copy of the layer inside the frame border folder before being divided.
Divide frame folder and create empty folder	Creates as many new frame border folders as divided frame borders.
Divide not folder but frame border	Creates neither a frame border folder nor a raster layer when dividing the frame border.

(4) Space of frame border in preference

When turned on, divides by spacing the border lines by the value configured in [Frame border] under [Ruler/Frame/Unit] on the [Preferences] dialog box.

(5) Horizontal space

Configures the space between borders when dividing a frame border.

When [Divide by straigh line] is selected for [Shape of division], configure the space between border lines when dividing a frame border vertically. This setting is not available when [Space of frame border in preference] is turned on.

(6) Vertical space

When [Divide by straigh line] is selected for [Shape of division], configures the space between border lines when dividing a frame border horizontally. This setting is not available when other than [Divide by straigh line] is selected for [Shape of division], or [Space of frame border in preference] is turned on.

Memo

When 0 is configured for [Horizontal space] and [Vertical space], only one line will be used for dividing a frame border.

D

Dot pen

Allows you to configure brush density when using the [Dot pen] sub tool.

Important **The [Dot pen] category is not available for layers whose [Expression color] is [Monochrome].**

(1) Brush density

Configures the opacity of each brush tip hair. The [Affected by] button allows you to select the settings of the tablet and the like which affect the brush density. For example, configuring [Pen pressure] for [Affected by] makes it easier to vary the tone in accordance with the pen pressure.

For [Affected by], see "Effect source settings" .

Drawing interval *

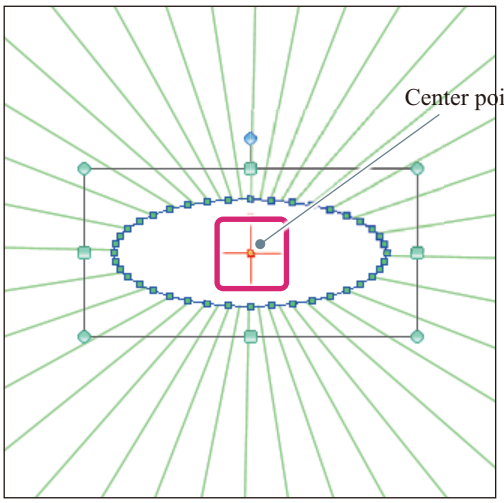
Allows you to configure the space between adjacent lines when drawing or editing a stream line, saturated line, or flash.

(1) Space of line

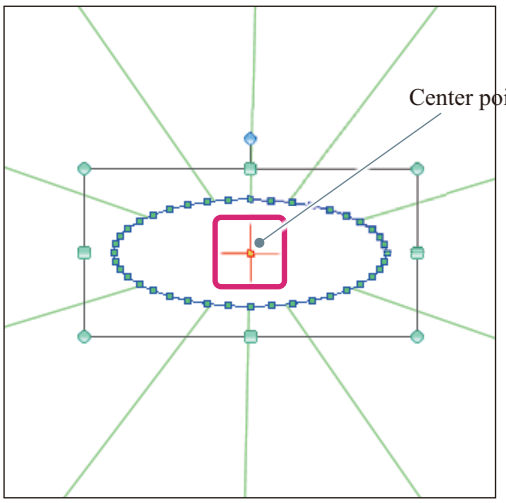
Configures the space between adjacent lines when drawing or editing a stream line, saturated line, or flash.

(2) Space of line (angle)

Configures the space between adjacent lines with reference to the center point when drawing or editing a stream line, saturated line, or flash. This item is not available when [Space (distance)] is selected.



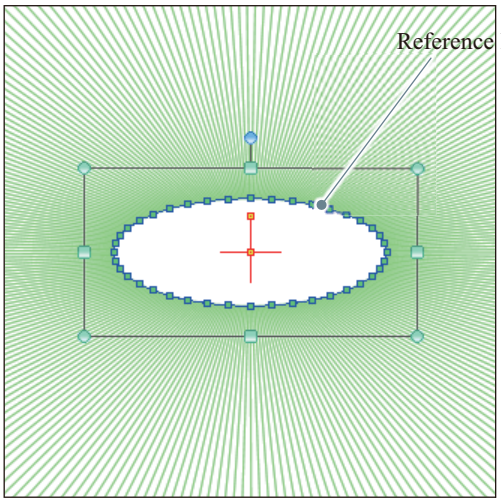
Space of line (angle): 10



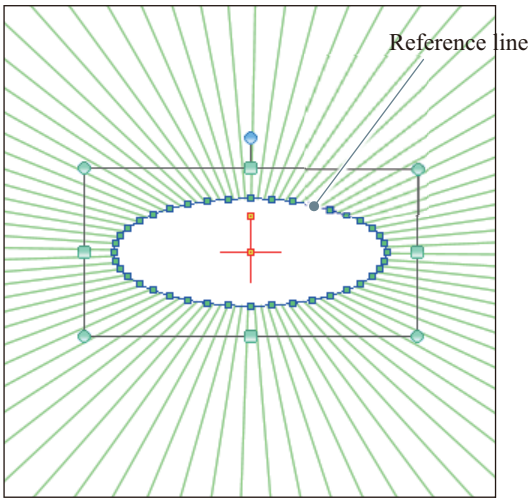
Space of line (angle): 35

(3) Space (distance)

Configures the space between adjacent lines with reference to the reference line when drawing or editing a stream line, saturated line, or flash. This item is not available when [Space of line (angle)] is selected.



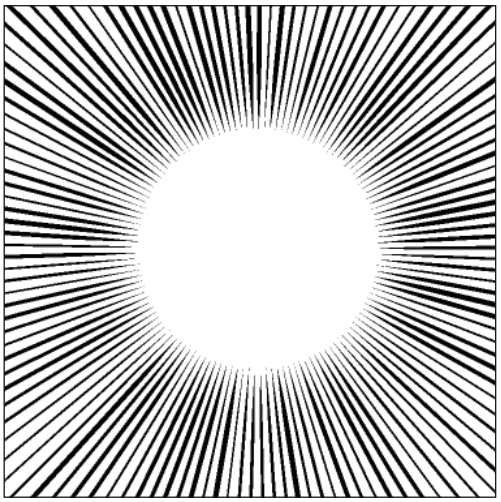
Space (distance): 10



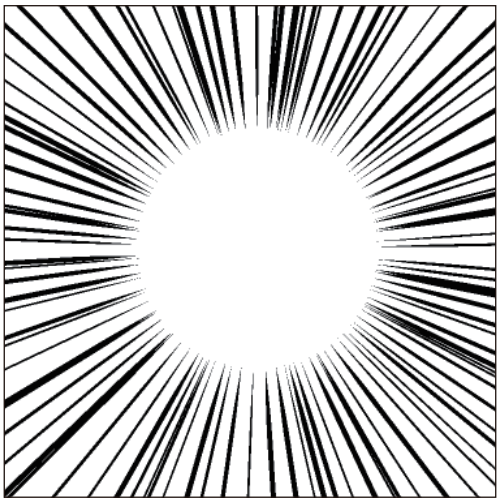
Space (distance): 35

(4) Disarray

When turned on, allows you to draw by varying the space between lines. An indicator allows you to configure the degree of variation in the space between line.



Disarray: OFF

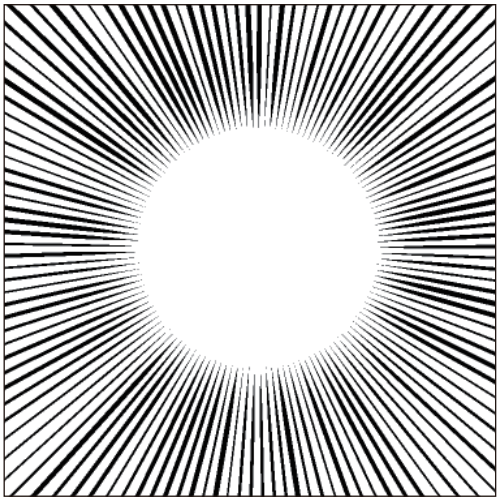


Disarray: ON

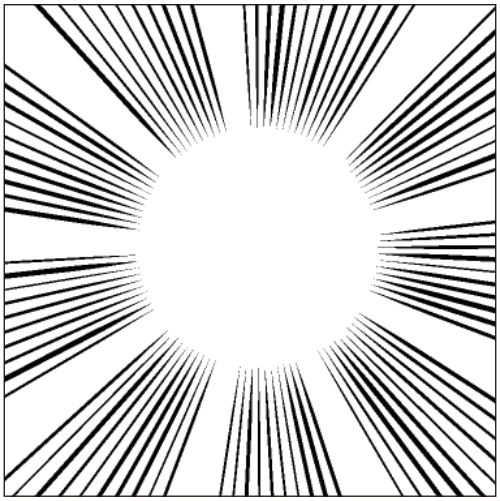
(5) Grouping

When turned on, creates [Groups] of lines. The gap separating one [Group] from the next is wider than the normal space.

A slider allows you to configure the number of lines per one group.



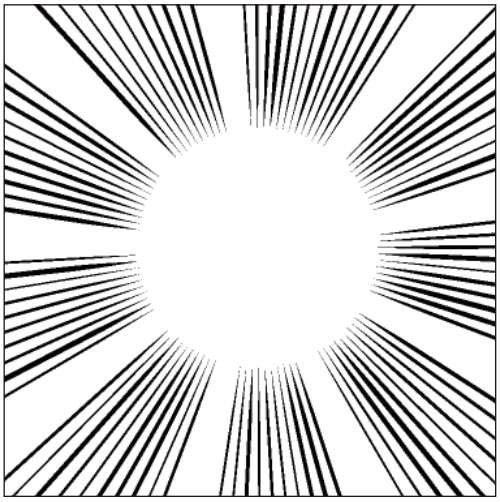
Grouping: OFF



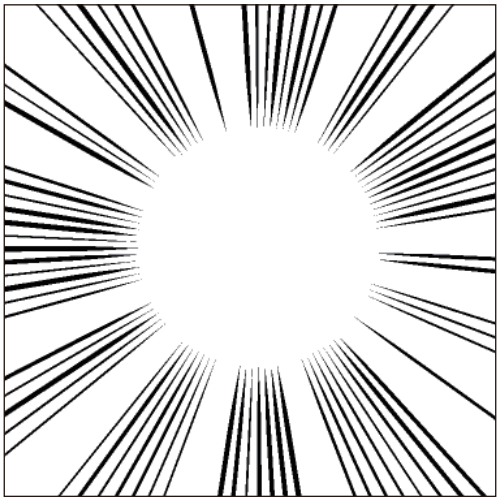
Grouping: ON

(6) Grouping disarray

When turned on, allows you to vary the number of lines drawn from one [Group] to the other. An indicator allows you to configure the degree of variation in the number of lines.



Grouping disarray: OFF



Grouping disarray: ON

(7) Gap

Allows you to configure the space between two adjacent [Groups]. Specify the gap by the number of lines that can be drawn in it.

(8) Maximum number of lines

Configures the maximum number of lines that can be drawn. The number of lines configured in this item will be the upper limit even when the stream line is drawn in a wide range.

Drawing position *

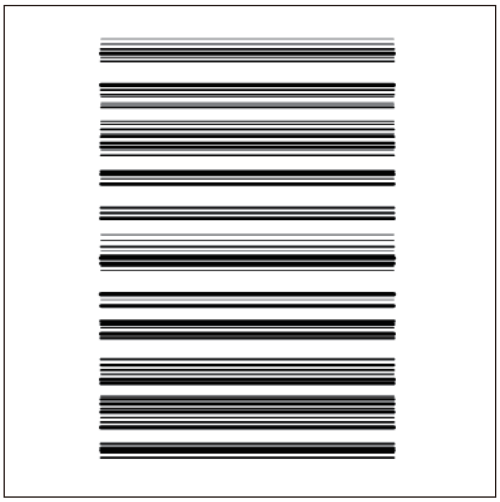
Allows you to configure the line length, drawing position and the like when drawing or editing a stream line, saturated line, or flash.

(1) Length

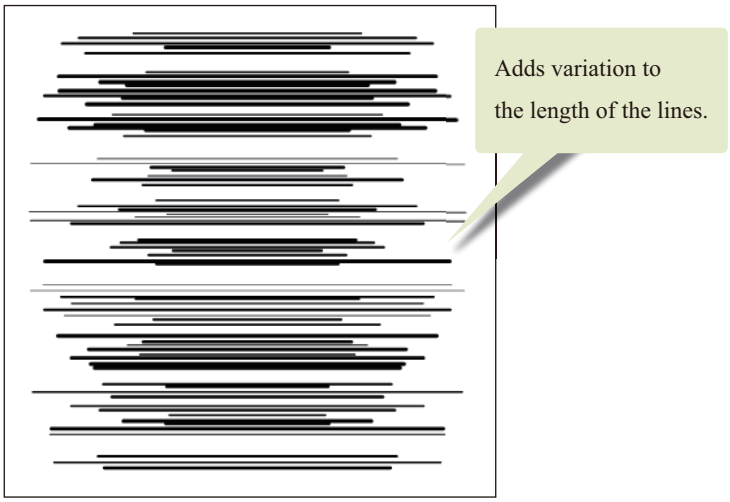
Configures the line length.

(2) Disarray

When turned on, allows you to draw lines of different lengths. An indicator allows you to configure the degree of variation in the length of the lines.



Disarray: OFF



Disarray: ON

(3) Extend outside frame

Extends the lines so that they reach the outside of the frame. The lines extend up to crop mark or canvas edge if a frame folder is not present.

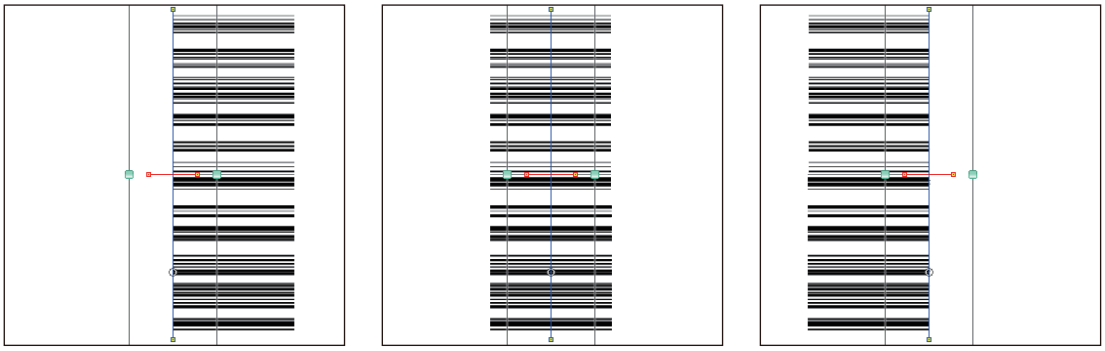
(4) Reference position

Configures the point of the line to be on the reference line.

Memo

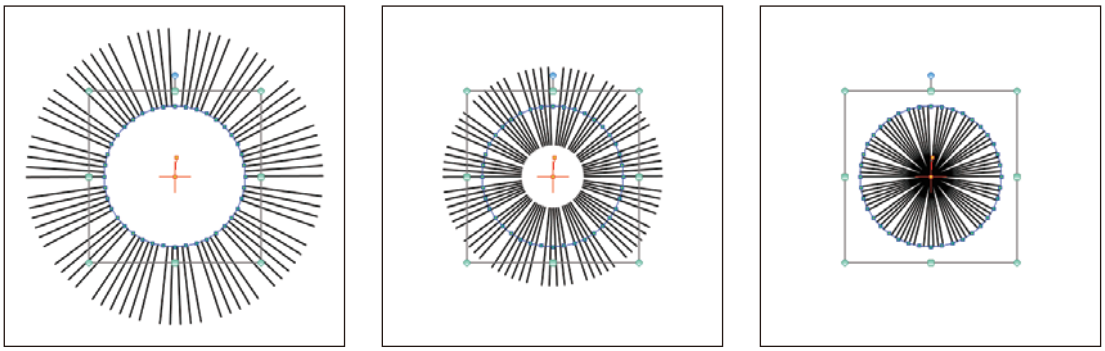
Reference line is a line specified when drawing a saturated line, and is displayed in blue. It serves as a position to refer to and the like when drawing a saturated line or stream line.

Stream line



Starting point　Middle point　Ending point

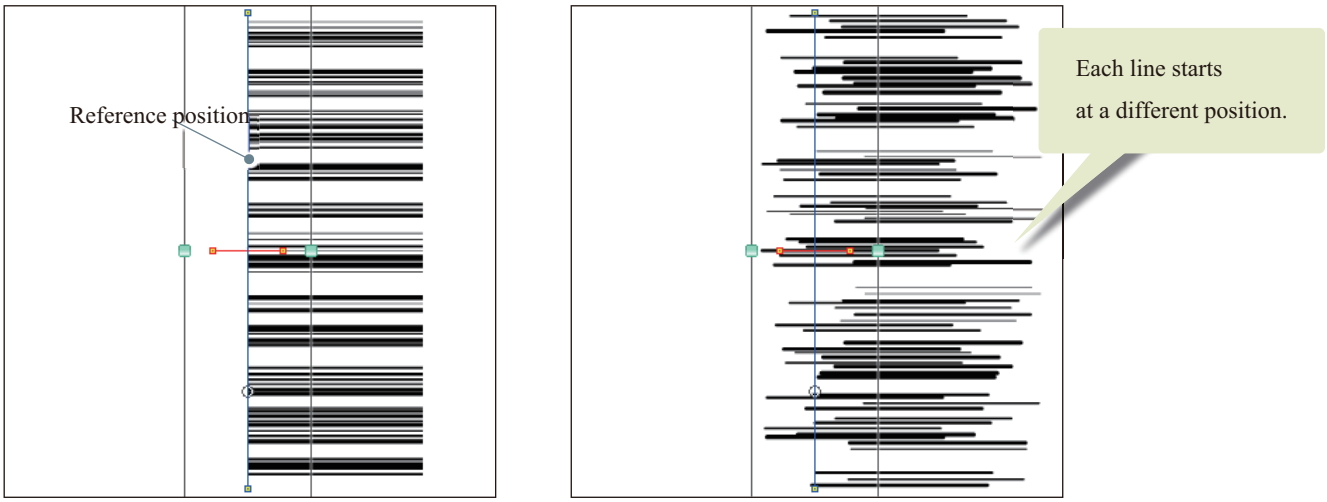
Saturated line



Inner side　Middle point　Outer side

(5) Gap from reference position

When turned on, allows you to vary the configured [Reference position]. A slider allows you to configure the degree of variation in the reference position.



Gap from reference position: OFF　Gap from reference position: ON, configured to 150

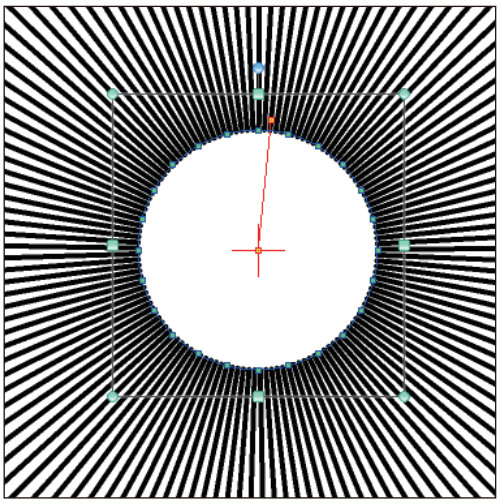
(6) Make reference position jags

When turned on, allows you to add mountains from jags in the drawing position of the saturated line.

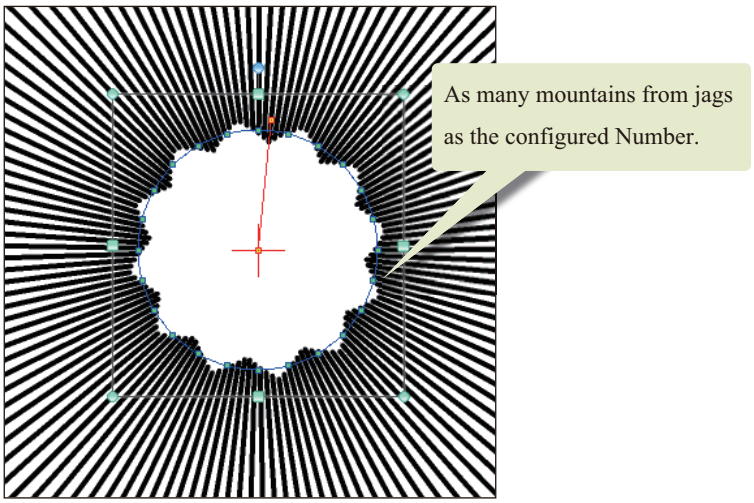
Memo **Turning on [Make reference position jagged] does not make the reference line be displayed jagged on the canvas.**

(7) Number

Configures the number of mountains from jags to be added in the drawing position when [Make the reference position jagged] is turned on.



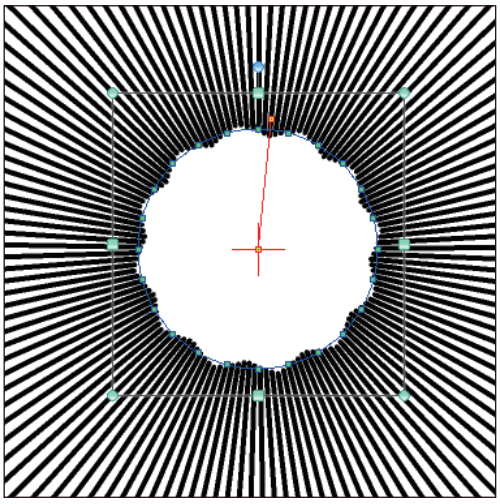
Number: 0



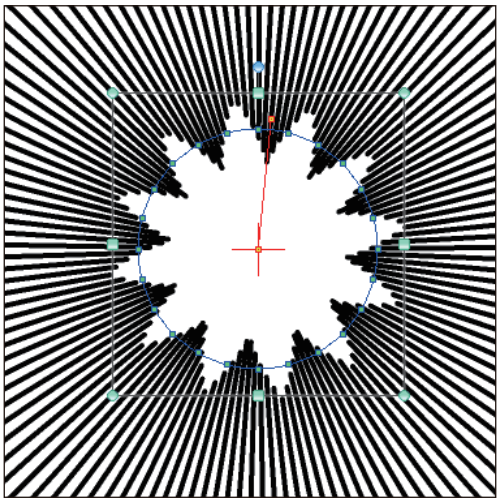
Number: 12

(8) Height

Configures the height of the mountains from jags added in the drawing position. The larger the value, the larger will be the height of the mountain from jags.



Height: 35



Height: 100

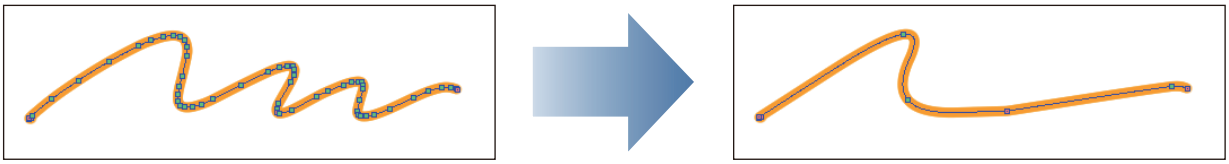
E

Edit line

Allows you to configure how much control points to reduce, or the shape of corners when a [Vector] layer or [Balloon] layer is selected with the [Simplify vector line] sub tool.

(1) Simplify

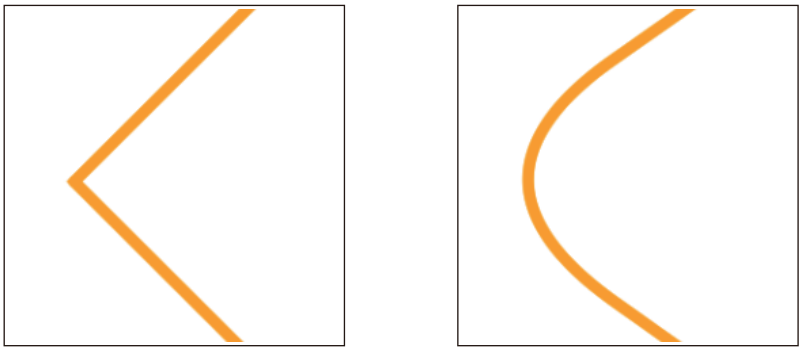
When turned on, allows you to simplify a line by reducing the number of control points. A slider allows you to configure how much control points to reduce. The larger the value, the more control points will be removed.



(2) Smooth corner

Allows you to configure the shape of corners when a line has corners.

When turned on, smooths the shape of corners. When turned off, the shape of the corners remain as they are (angled).



Smooth corner: OFF

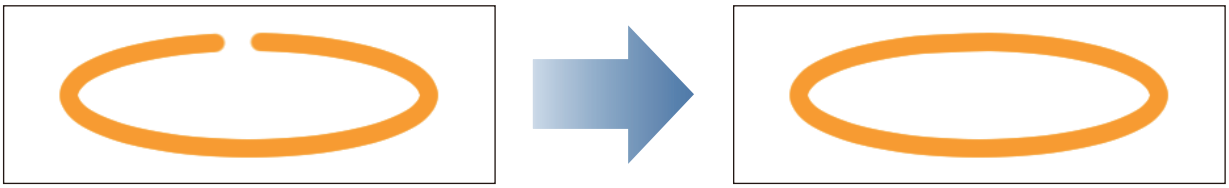
Smooth corner: ON

(3) Process whole line

When turned on, clicking a point on the line simplifies the entire line.

(4) Connect line

When turned on, connects lines drawn separately. A slider allows you to adjust the strength of the effect. The larger the value, the stronger will be the effect.



(5) Connect lines in different attribute

When turned on, allows you to connect lines with different colors, hardness, thickness, tip shape, and so on.

(6) Delete shorter line

When turned on, allows you to erase short lines within a processing area. A slider allows you to configure the length of lines to erase.

Edit settings

Allows you to configure the direction of letters in a text, how to add a layer and the like when using the [Text] sub tool, or when the [Text] layer is selected with the [Object] sub tool.

Important **Some settings may not display depending on the selected tool or sub tool.**

(1) Text direction

Select text direction from [Vertical] and [Horizontal].

(2) Anti-aliasing

Configure anti-aliasing for text.

Canvas setting	Configuring [Monochrome] for [Default expression color] on the [New] dialog box automatically disables the anti-aliasing. This item does not display when the [Object] sub tool is selected.
On	Enables anti-aliasing.
Off	Disables anti-aliasing.

Memo **The [New] dialog box displays when [File] menu → [New] is selected.**

(3) TateChuYoko (Horizontal in Vertical)

Displays half-width letters horizontally when text is input vertically. Select the number of letters to display horizontally from [None], [1 letters], [2 letters], [3 letters] and [4 letters].

For example, if [2 letters] is configured, 2 half-width letters are displayed horizontally but 3 or more half-width letters are displayed vertically.

When [2 letters] is configured for Horizontal in Vertical

(4) Display quality while editing

Allows you to configure the display quality of the text while it is being edited.

Fast	The text may be displayed coarse during editing but the load on your computer may be eased.
High quality	The text being edited displays in high quality but your computer may become slow depending on the environment.

(5) Show resize handle

Displays/hides resize handles for scaling up/down the text.

(6) How to add

Configures the method for adding text layers during text input. This item is available only when a [Text] layer or [Balloon] layer is selected.

Create layer always	When text is input, creates a new text layer.
Add to selected text	If text is input when a [Text] layer is selected, adds text to the selected text layer.
Auto detect where to insert	Creates a new [Text] layer depending on where the text is input. When text is input inside a balloon or near a selected text, adds text to the existing [Text] layer or [Balloon] layer.

Erase

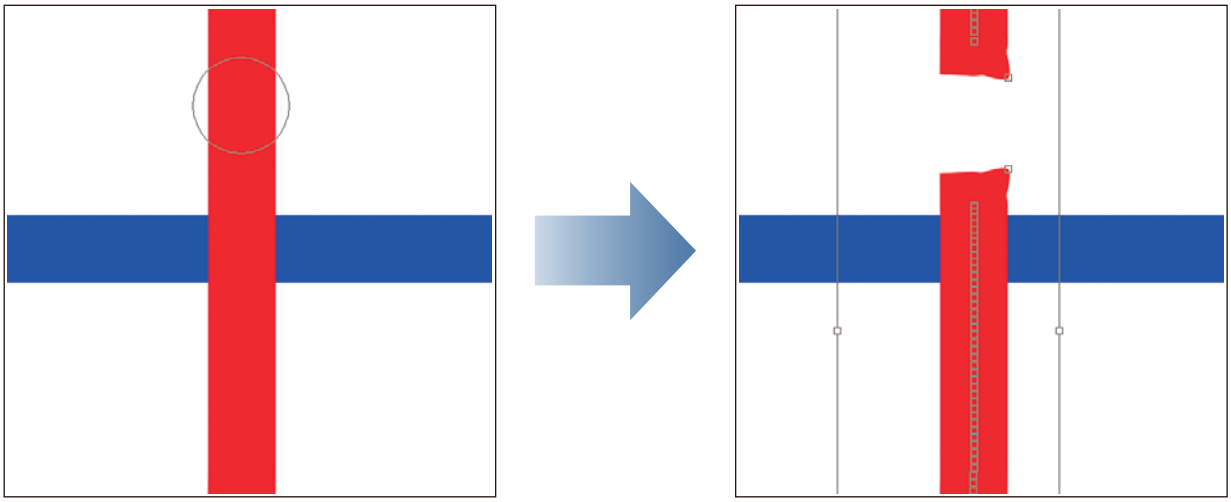
Allows you to configure how to erase lines drawn on a [Vector] layer, or the layer(s) to refer to erase when using the [Eraser] tool and the like.

(1) Vector eraser

Specify how to erase a line drawn on a [Vector layer] using the tool.

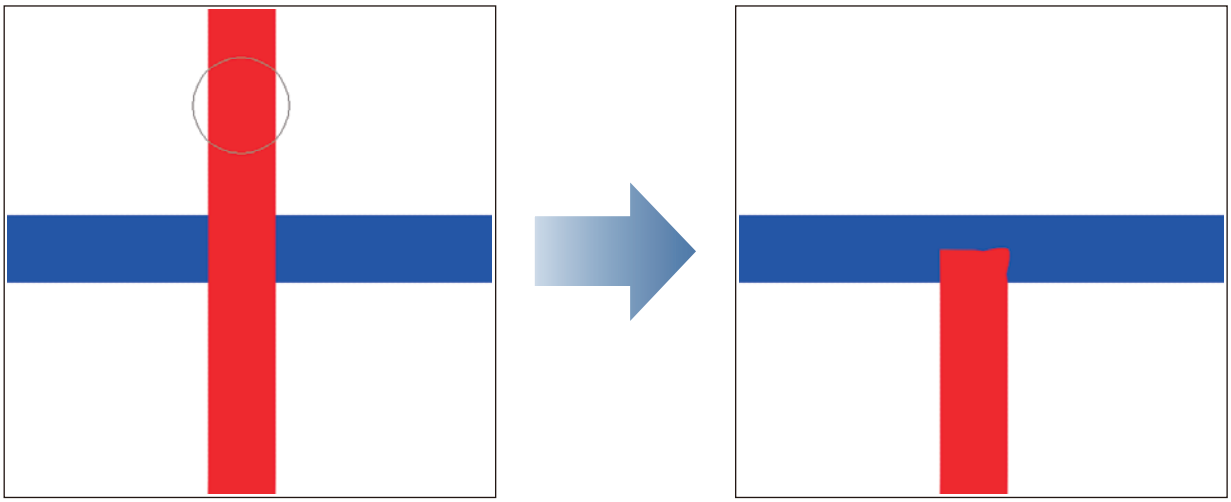
Erase touching part

Erases only the parts of the line touched with the tool.



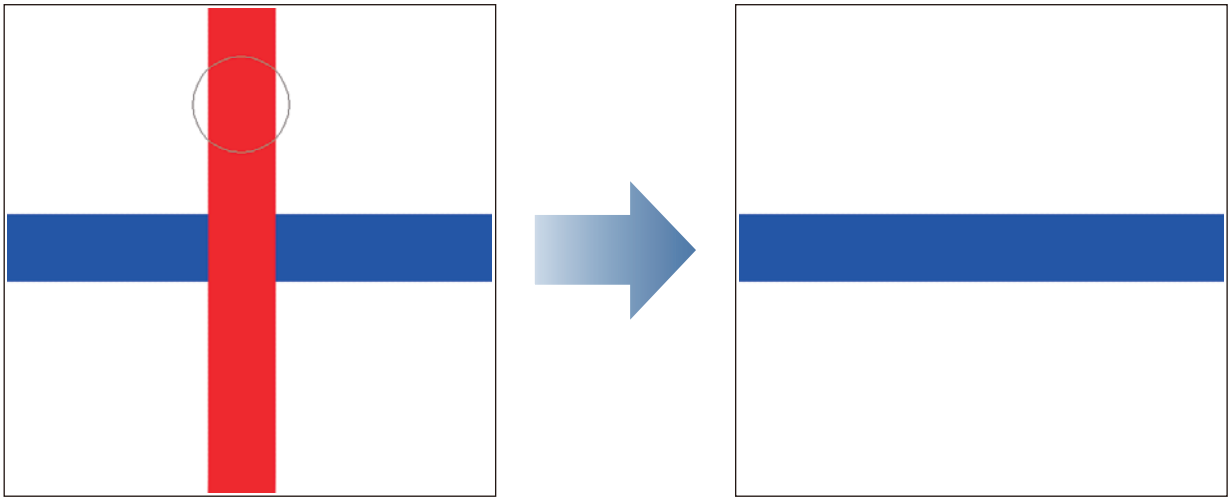
Erase up to intersection

Erases a line up to the intersection with another line drawn on the [Vector] layer.



Overall line

Completely erases the line touched with the tool.



(2) Refer all layers

When turned on, lines drawn on other [Vector] layer(s) as well as [Frame border folder(s)] (*) are referred to when [Erase up to intersection] is selected for [Vector eraser].

(3) Erase all layer

When turned on, erases drawings in the dragged area of all layers.

Eye dropper

Allows you to configure the source for acquiring a color and the like when using the [Eye dropper] tool.

(1) Select From

Allows you to configure the layer(s) the tool will refer to.

Current layer	Refers to the layer on the [Layer] palette that is being edited.
Top layer	Refers to the uppermost layer on which the clicked point is not transparent.
Image	Allows you to acquire a color displayed on the screen independently of the layer where it is used.

(2) Non-reference layer *

Toggles non-reference to a layer between on and off.

(1) Not refer to draft	Excludes the [Draft] layer from the targets of reference.
(2) Not refer to text	Excludes the [Text] layer from the targets of reference.
(3) Not refer to paper	Excludes the [Paper] layer from the targets of reference.
(4) Not refer to locked layer	Excludes locked layer(s) from the targets of reference.

(3) Surrounding color

Acquires a color average of the specified area including its surrounding. A slider allows you to configure the size of the surrounding area.

F

Figure

Allows you to configure a shape for a figure when creating a selection using a figure, or drawing a figure.

Important **Some settings may not display depending on the selected tool or sub tool.**

(1) Figure

Specifies the shape of the figure to create. Select from [Rectangle]. [Ellipse] and [Polygon].

(2) Number of vertexes of polygon

Specifies the number of vertexes of the polygon when [Polygon] is selected for [Figure].

(3) Roundness of corner

When turned on, the corners of the figure are rounded off. A slider allows you to configure the roundness. The larger the value, the more rounded will be the corner. You can select how to configure the roundness of the corner from [Method to specify].

(4) Method to specify

Configure the method for specifying the roundness of the corner.

Specified ratio	Specifies the area to round off as a ratio (%) of the side of the figure.
Specified length	Specifies the area to round off as a distance from the vertex.

(5) Line/Fill

Select whether to draw the figure using only lines or paint.

Create fill	Fills the created closed figure with the drawing color. No outline is drawn for the figure.
Create line	Draws the figure using only lines.
Create both line and fill	Draws the outline of the figure and fills the closed area. The drawing colors for the outline and the closed area can be specified by [Line color] and [Fill color].

Important **[Line/Fill] is not available for [Vector] layers.**

(6) Line color

Specifies the color for the lines of the figure.

Main color	Configures the main drawing color as line color.
Sub color	Configures the sub drawing color as line color.
User color	Configures the color specified by the user as line color. Selecting a color with a color palette, eye dropper and the like, and clicking the icon allows you to configure the color. The configured color is not affected by changes in the main drawing color and sub drawing color, even when changed before the line is drawn.
Select user color	Displays the dialog box for selecting a color. This item does not display as icon.

(7) Fill color

Specifies the color for filling the figure.

Main color	The fill color is the main drawing color.
Sub color	The fill color is the sub drawing color.
User color	The fill color is that specified by the user. Selecting a color with a color palette, eye dropper and the like, and clicking the icon allows you to configure the color. The configured color is not affected by changes in the main drawing color and sub drawing color, even when changed before the line is drawn.
Select user color	Displays the dialog box for selecting a color. This item does not display as icon.

(8) Aspect type

When turned on, allows you to specify the aspect ratio for the figure. You can select how to configure the aspect ratio from the following options.

Specified ratio	The aspect ratio is fixed.
Specified length	The figure is created using the sizes configured in [Width] and [Height].

(9) Width

Configures the figure width when [Aspect type] is turned on.

(10) Height

Configures the figure height when [Aspect type] is turned on.

Fill

Displayed items vary depending on the selected tool or sub tool.

- "When the Fill Tool or Auto select Tool Is Selected"
- "When the Gradient layer or Fill in monochrome layer is selected"

When the Fill Tool or Auto select Tool Is Selected

Allows you to configure the area to fill and the border of the selected area in detail.

Important

The [Fill] tool and [Fill] category of the [Auto select] tool are the same function. However, the output results are different depending on the tool. The following describes each item using the creation of a selection as an example.

(1) Follow adjacent pixel

Creates a selection by tracing pixels of the same color as that of the clicked point. When turned off, creates a selection that includes all pixels of the same color on the canvas. The following figure shows the selection in green.

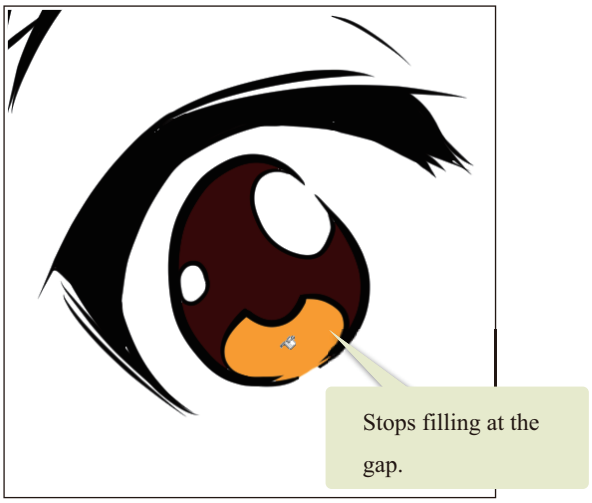
Follow adjacent pixel: ON

Follow adjacent pixel: OFF

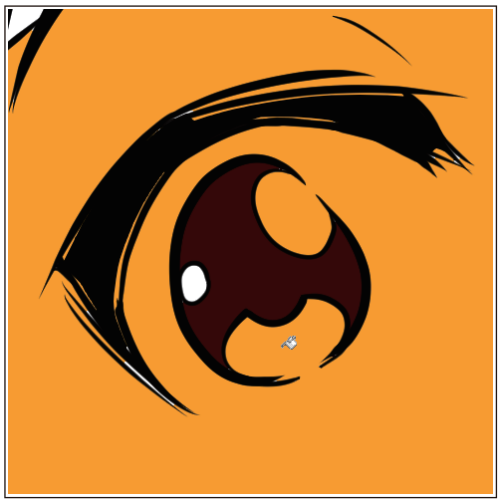
(2) Close gap

When gaps are present in the area to select, the selected area is created by closing gaps up to a specified number of pixels. Use the indicator or slider to specify the size of the gap. The figure below shows an example when fill is executed. The area to fill and the selection are the same.

Memo **Depending on your environment, configuring a large value for [Close gap] may take time to complete creating the selection.**



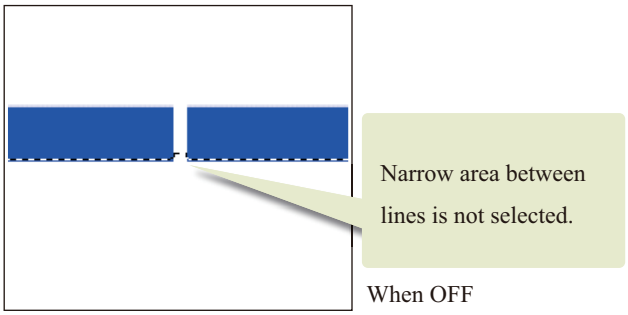
Close gap: ON



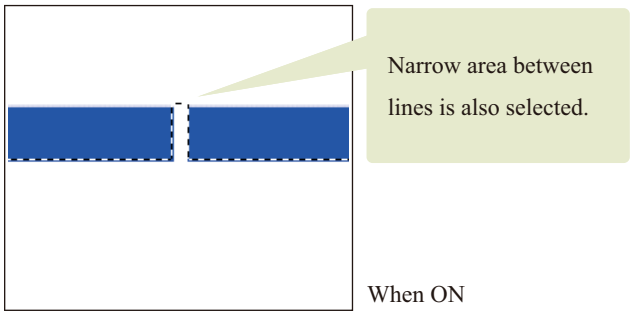
Close gap: OFF

(3) Soak into narrow area

When a gap smaller than the value configured in [Close gap] is found, the gap is included in the selection area if the continuation of the line is closed. This setting is available when [Close gap] is turned on.



When OFF



When ON

(4) Color margin

Configures the tolerance in the difference of colors when creating a selection area. The larger the value, the larger is the tolerance to include different colors than that of the clicked point in the selection area.

(5) Area scaling

When creating a selection, the selection to create is enlarged or reduced from the original by the specified pixels.

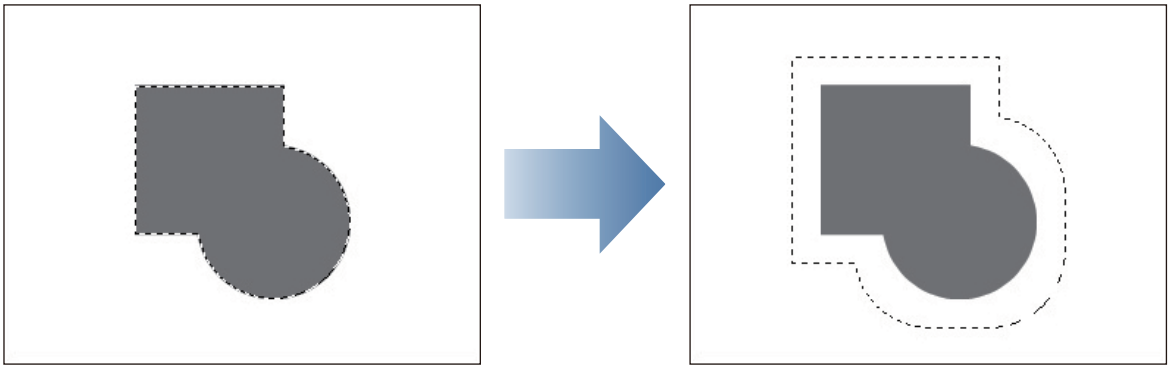
(6) Zoom method

Configures the shape of corners of the scaled area when [Area scaling] is turned on.

Rectangle

Determines the area by placing a rectangle on each pixel on the outline of the area to enlarge or reduce.

The outline of the enlarged or reduced area often becomes rectangular.

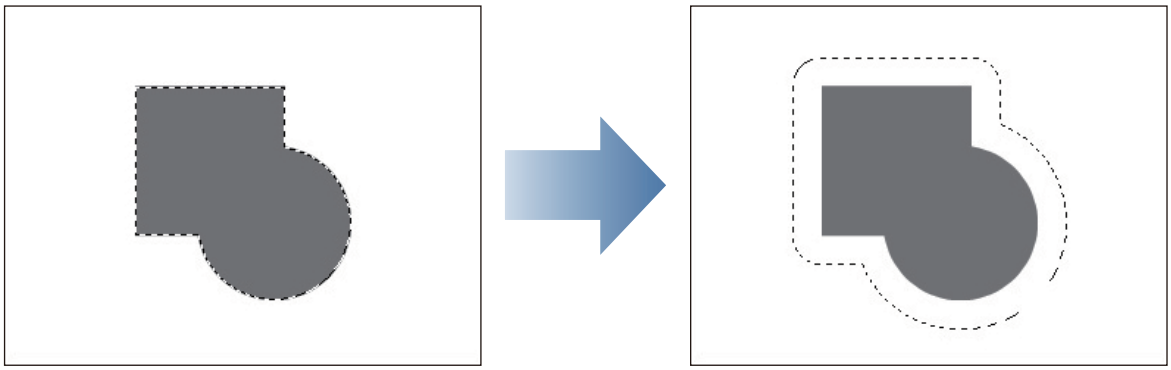


Without area scaling　　Rectangular area scaling

Round

Determines the area by placing a circle on each pixel on the outline of the area to enlarge or reduce.

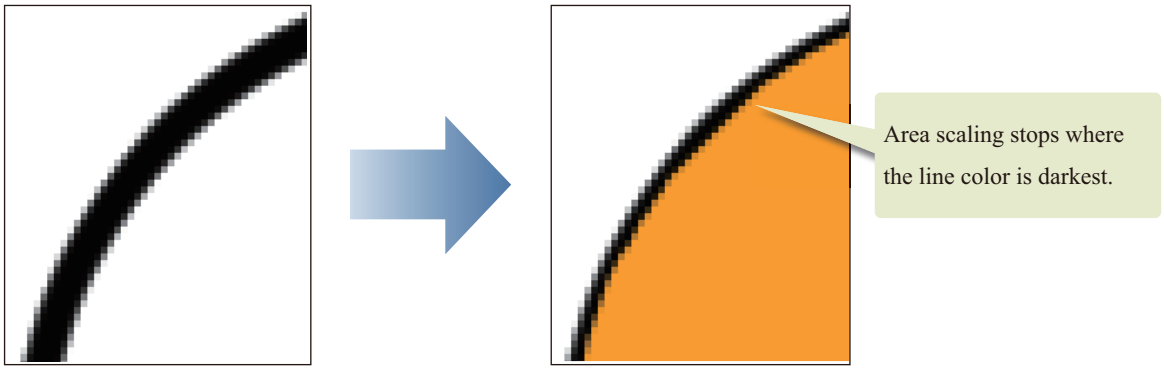
The outline of the enlarged or reduced area becomes round as angles are rounded off.



Without area scaling　　Round area scaling

To darkest pixel

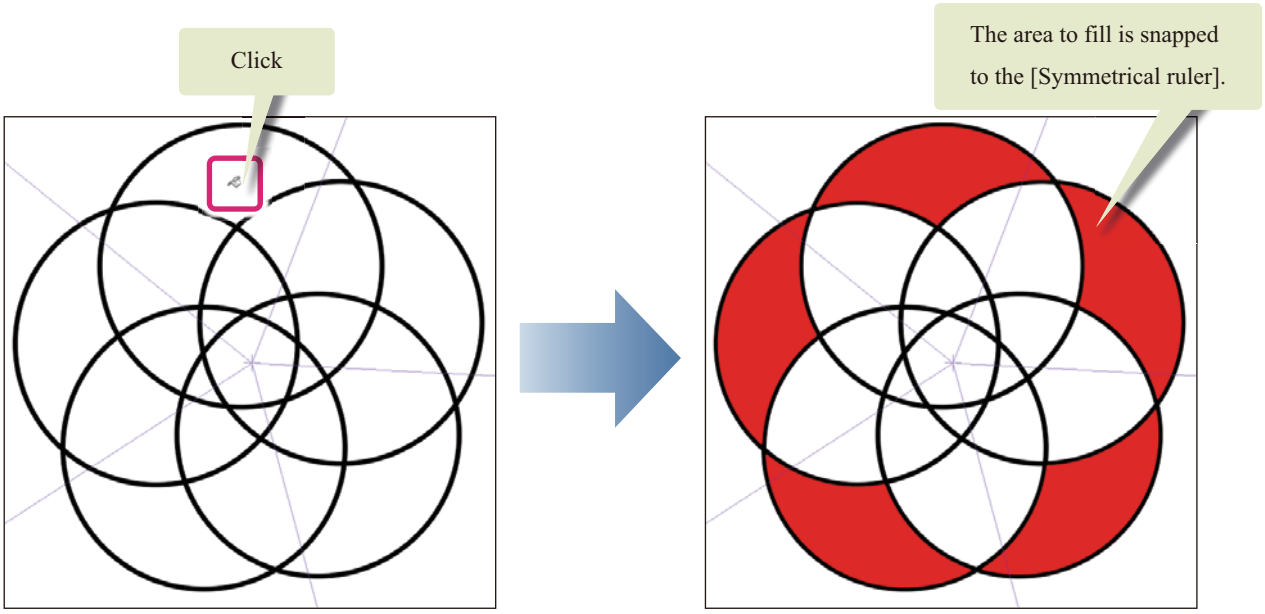
Recognizes the area with the darkest color (area with highest opacity) and scales the selection area up to that area.



Before area scaling　　Area scaling up to darkest pixel

(7) Snap to symmetrical ruler *

When turned on, the [Fill] tool or [Auto select] tool snaps to the [Symmetrical ruler].



When the Gradient layer or Fill in monochrome layer is selected

Allows you to edit the [Gradient] layer or [Fill in monochrome] layer. It also allows you to switch the layer type.

(1) Settings of filling

Configure how to fill. Settings displayed subsequently vary depending on the option selected for this item.

Gradient	The selected layer is converted into a [Gradient] layer and filled with gradation.
Fill in monochrome	The selected layer is converted into a [Fill in monochrome] layer and filled with one color.

(2) Fill color

Configures the color in which to fill the Fill in monochrome layer. Clicking the color indicator displays the dialog box for selecting a color. You can also select a color from the color palettes.

(3) Color bar

Previews the configured gradation. When clicked, displays the [Edit gradation] dialog box where you will be able to configure the gradation in detail. For the [Edit gradation] dialog box, see "[Edit gradient] Dialog Box" .

(4) Advanced Settings

When clicked, displays the [Edit gradation] dialog box where you will be able to configure the gradation in detail. For the [Edit gradation] dialog box, see "[Edit gradient] Dialog Box" .

(5) Shape

Configure the shape for the gradation.

Linear	Draws a linear gradation in accordance with the dragged length.
Circle	Draws a gradation in accordance with the circular shape created by dragging the tool.
Ellipse	Draws a gradation in accordance with the elliptical shape created by dragging the tool.

(6) Size

Re-configures the shape for the gradation.

(7) Angle

Re-configures the angle for the gradation. This setting is available when [Shape] is [Line] or [Ellipse].

(8) Thickness

Re-configures the thickness for the gradation. This setting is available when [Shape] is [Ellipse].

(9) Edge process

Configure the drawing outside the dragged area.

No repeat	Draws gradation in the dragged area. Fills the area before the starting point in the starting color of the gradation, and the area after the end point, in the end color of the gradation.
Repeat	Repeats the gradation in the same direction.
Wrap	Repeats the gradation by alternating the direction.
Not draw	Draws gradation in the dragged area. Does not draw anything in the areas before the starting point and after the end point.

Font

Allows you to configure the type and size of letters and the like when using the [Text] sub tool, or when the [Text] layer is selected with the [Object] sub tool.

(1) Font

Displays a font list from where you can select the one to use. For the font list, see "Font List *" .

(2) Mixing font

Configures addition and deletion of mixing fonts. Mixing font is a combination of font and size configured for each type of letter.

(1) New	Creates a new mixing font. Clicking the item displays the [Create mixing font] dialog box. For [Create mixing font] dialog box, see "[Create mixing font] Dialog Box" .
(2) Change	Changes the settings for the mixing font selected in [Font]. Clicking the item displays the [Create mixing font] dialog box. The item is not displayed if there is a text being edited. Changes in the mixing font settings are not reflected in texts with mixing fonts input before the changes were made. For [Create mixing font] dialog box, see "[Create mixing font] Dialog Box" .
(3) Delete	Deletes the mixing font selected in [Font]. The item is not displayed if there is a text being edited.

(3) Size

Adjusts the letter size in points or Q.

(4) Word space

Configures the space between letters in points or Q.

Memo

- **To display [Word space], turn on [Use drawing compatible with IllustSudio/Manga Studio 4.0] under [File] → [Text] in the [Preferences] dialog box that displays when [File] menu ([Manga Studio 5.0] menu in Mac OS X version) → [Preferences] is selected.**
- **The unit of [Size] and [Word space] can be toggled between points (pt) and Q. It is configured in [Ruler/Frame/Unit] → [Unit] on the [Preferences] dialog box that displays when [File] menu ([Manga Studio 5.0] menu in Mac OS X version) → [Preferences] is selected.**

(5) Style

Configure one of the following styles.

Bold	Makes the letters thick.
Italic	Leans the letters to the right.
Under/Side line	Adds an underline or a side line. Underline applies to text written horizontally while side line applies to text written vertically.
Strikeout	Adds a horizontal line through the center of the letters. This item does not display for vertical text.

Memo

- **To display [Italic] and [Strikeout], turn on [Use drawing compatible with IllustSudio/Manga Studio 4.0] under [File] → [Text] in the [Preferences] dialog box that displays when [File] menu ([Manga Studio 5.0] menu in Mac OS X version) → [Preferences] is selected.**
- **To display [Side line] and [Strikeout], turn on [Use drawing compatible with IllustSudio/Manga Studio 4.0] under [File] → [Text] in the [Preferences] dialog box that displays when [File] menu ([Manga Studio 5.0] menu in Mac OS X version) → [Preferences] is selected.**
- **Horizontal text and vertical text can be switched with [Text direction] in the [Edit setting] category. For details, see "Edit settings" .**

(6) Open face

When turned on, converts letters into open face. The thickness of the open face may be selected from [Open face (light)] and [Open face (bold)].

Memo

To display [Open face], turn on [Use drawing compatible with IllustSudio/Manga Studio 4.0] under [File] → [Text] in the [Preferences] dialog box that displays when [File] menu ([Manga Studio 5.0] menu in Mac OS X version) → [Preferences] is selected.

Font List *

This is a screen displayed when selecting a font. It allows you to configure settings such as switching of the [Font list] to display, method of displaying the fonts, and so on.

(1) Font list

Displays a list of available fonts.

Memo

To display more fonts in the [Font list], resize it by dragging one of the edges.

(2) Display font name

Displays only the font name on the [Font list].

(3) Display font name in specific font

Displays each font name on the [Font list] using the corresponding font.

(4) Display text in specific font

Previews the selected text on the [Font list]. Sample alphanumeric characters and hiragana are displayed if a text is not selected.

(5) Switch font list

Switches the [Font list] to display. You can create and edit the [Font list] with the [Settings of font list] dialog box that displays when you click [Settings of font list]. For details on the [Settings of the font list] dialog box, see "[Settings of font list] Dialog Box" .

(6) Settings of font list

Displays the [Settings of font list] dialog box, which allows you to configure a [Font list]. For details on the [Settings of font list] dialog box, see "[Settings of font list] Dialog Box" .

[Settings of font list] Dialog Box

A dialog box that displays when [Settings of font list] is clicked. Allows you to manage, such as create, edit, and delete [Font lists].

(1) Font list

Displays a list of [Font lists].

(2) New

Creates a new [Font list]. When clicked, adds a [Font list] to the list of [Font lists] and at the same time, enables the selection of fonts from [Available fonts].

(3) Change name

Changes the name of the [Font list] selected on the list of [Font lists].

Memo

You can also change the name of a [Font list] by double clicking its name on the list of [Font lists].

(4) Duplicate

Makes a copy of the [Font list] selected on the list of [Font lists].

(5) Delete

Deletes the [Font list] selected on the list of [Font lists].

(6) Available fonts

Allows you to select a font to display on the [Font list]. Selecting the font to display from [Available fonts] and turning on its check box adds the font to the [Font list].

Memo

- **If [Available fonts] is displayed empty, select the [Font list] from the list of [Font lists].**
- **To display more fonts in [Available fonts], resize it by dragging one of the edges.**

(7) Display font name

Displays only the font names on [Available fonts].

(8) Display font name in specific font

Displays each font name on [Available fonts] using the corresponding font.

(9) Select all

Selects all fonts displayed on [Available fonts].

(10) Deselect all

Deselects the selection of all of the fonts displayed on [Available fonts].

[Create mixing font] Dialog Box

Use this dialog box to configure a mixing font.

(1) Mixing font name

Input a name for the mixing font. This item cannot be input when the dialog is displayed as a result of clicking [Change]f for [Mixing font].

(2) Default

Configures the default font. The default font applies when the font and letter size settings are disabled.

By default, the font configured in [Font] on the [Tool property] palette or [Sub tool detail] palette displays.

(3) Font

Configures the font type and size for each letter type.

(1) Enable/Disable	Enables/disables the font and size settings.
(2) Letter type	Type of letter to which mixing font can be configured. The following options are available: [Hiragana/Katakana], [Chinese character], [Signs], [Single-byte numbers], [Singly-byte alphabet], [Punctuation mark] and [External character].
(3) Font	Displays a font list from where you can configure the one to use. For the font list, see "Font List *" .
(4) Letter size	Specifies the letter size in %. The letter size changes based on the value configured for [Size] on the [Tool property] palette and [Sub tool detail] palette.

Frame Border

Allows you to configure settings related to the frame border drawing when a [Frame border folder] is selected with the [Object] sub tool.

(1) Draw border

Displays border lines in the frame border folder.

(2) Main color

Configures a color for the frame border. Clicking the color indicator displays the dialog box for choosing a color.

(3) Sub color

Allows you to specify a sub drawing color for the frame border. Clicking the color indicator displays the dialog box for choosing a color. This setting is available when the frame border is to be drawn by mixing the sub drawing color, for example.

(4) Snap

When turned on, you can draw lines along the frame borders by a drawing tool.

(5) Hide overlapping frame borders

When turned on, the lower frame border lines of overlapping parts in the same frame border folder are hidden.

G

Gradient

Allows you to configure a gradation pattern when using the [Gradient] tool.

(1) Color bar

Previews the configured gradation. When clicked, displays the [Edit gradient] dialog Box where you will be able to configure the gradation in detail. For the [Edit gradient] dialog Box, see "[Edit gradient] Dialog Box" .

(2) Advanced Settings

When clicked, displays the [Edit gradient] dialog Box where you will be able to configure the gradation in detail. For the [Edit gradient] dialog Box, see "[Edit gradient] Dialog Box" .

(3) Shape

Allows you to configure the shape for the gradation.

Linear	Draws a linear gradation in accordance with the dragged length.
Circle	Draws a gradation in accordance with the circular shape created by dragging the tool.
Ellipse	Draws a gradation in accordance with the elliptical shape created by dragging the tool.

(4) Edge process

Allows you to configure the drawing outside the dragged area.

No repeat	Draws gradation in the dragged area. Fills the area before the starting point in the starting color of the gradation, and the area after the end point, in the end color of the gradation.
Repeat	Repeats the gradation in the same direction.
Wrap	Repeats the gradation by alternating the direction.
Not draw	Draws gradation in the dragged area. Does not draw anything in the areas before the starting point and after the end point.

(5) Start from center

When turned on, gradation is drawn centered in the point where you started dragging. This setting is available only when [Shape] is [Circle] or [Ellipse].

(6) Step of angle

Allows you to configure the minimum step for adjusting the gradation angle.

[Edit gradient] Dialog Box

(1) Color bar

Previews the configured gradation.

(2) Node

Allows you to configure the color for the gradation. You may create multiple nodes. Clicking an empty space adds a [Δ].

Dragging a node horizontally allows you to adjust the gradation. A selected node is indicated by a colored [Δ].

To delete a node, drag [Δ] vertically.

(3) Position

Allows you to configure the position of the selected node.

(4) Opacity

Allows you to configure the opacity of the selected node.

(5) Select left node

Switches the selected node to the next node on the left.

(6) Select right node

Switches the selected node to the next node on the right.

(7) Reverse gradient

Inverts the gradation settings.

(8) Delete node

Deletes the selected node.

(9) Color

Configures a color for the selected node.

Specified color	Allows you to configure a specified color for node color. Clicking the color indicator displays the dialog box for selecting a color.
Main drawing color	Configures the main drawing color for node color. Changing the main drawing color with a color palette also changes the node color.
Sub drawing color	Configures the sub drawing color for node color. Changing the sub drawing color with a color palette also changes the node color.

(10) Mixing rate curve

Allows you to adjust the change in color between the selected node and that to the right.

Mixing rate curve

- The horizontal axis of the graph indicates the position of the nodes.
- The vertical axis of the graph indicates the color mixing rate with respect to the node at the right. The larger the value, the more proximate is the color of the node to that of the node at the right. The smaller the value, the more proximate is to the color of the selected node. Clicking on the curve allows you to add up to 16 points, which you can drag to adjust the curve. Dragging a point out of the graph allows you to delete the point.

I

Image material

Allows you to configure the size of an image material when the [Image material] layer is selected with the [Object] sub tool.

(1) Scaling ratio (Horizontal)

Specifies the horizontal width of an imported image as a percentage of the original image (%).

(2) Scaling ratio (Vertical)

Specifies the vertical width of an imported image as a percentage of the original image (%).

(3) Keep ratio of original image

Scales up/down with the original aspect ratio kept unchanged.

(4) Rotation angle

Specifies the image rotation angle with respect to the horizontal position.

(5) Adjust Position

Allows you to adjust the size of an image material being edited automatically. The size is specified by the size of the [Guide] of the image material.

Canvas	The size of [Guide] of an image material is adjusted so that it is included in [Canvas].
Bleed border	The size of [Guide] of an image material is adjusted so that it is included in [Bleed border].
Cropped border	The size of [Guide] of an image material is adjusted so that it is included in [Cropped border].
Default border	The size of [Guide] of an image material is adjusted so that it is included in [Default border].
Free position	The size of [Guide] of an image material is not adjusted.

Memo

When [Bleed border], [Cropped border], or [Default border] is selected on a canvas on which [Bleed border], [Cropped border], and [Default border] are not configured, the size of [Guide] is adjusted so that it is included in [Canvas].

(6) How to correct

Configure how to blend colors between adjacent pixels.

Smooth	The color separation line is smooth.
Hard outline	The color separation line is sharp.

Image settings

Allows you to configure the size of an image to transform when an item is selected from the [Edit] menu → [Transform].

Important **Some settings may not display depending on the selected command.**

(1) Scaling ratio (Horizontal)

Specifies the horizontal width of an imported image as a percentage of the original image (%).

(2) Scaling ratio (Vertical)

Specifies the vertical width of an imported image as a percentage of the original image (%).

(3) Keep ratio of original image

Scales up/down with the original aspect ratio kept unchanged.

(4) Rotation angle

Specifies the image rotation angle with respect to the horizontal position.

(5) Adjust Position

Allows you to adjust the size of an image being transformed automatically. The size is specified by the size of the [Guide] of the image to transform.

Canvas	The size of [Guide] of an image material is adjusted so that it is included in [Canvas].
Bleed border	The size of [Guide] of an image material is adjusted so that it is included in [Bleed border].
Cropped border	The size of [Guide] of an image material is adjusted so that it is included in [Cropped border].
Default border	The size of [Guide] of an image material is adjusted so that it is included in [Default border].
Free position	The size of [Guide] of an image material is not adjusted.

Memo

- **When [Bleed border], [Cropped], or [Default border] is selected on a canvas on which [Bleed border], [Cropped], and [Default border] are not configured, the size of [Guide] is adjusted so that it is included in [Canvas].**
- **[Adjust Position] settings are prioritized when recording [Edit] menu → [Transform] operations in an auto action. To record other settings, configure [Adjust Position] to [Free position] before recording them.**

(6) How to correct

Configure how to blend colors between adjacent pixels.

Smooth	The outline of a color border is smooth since adjacent pixels blend. However, the outline may become blurred depending on the content being transformed.
Hard outline	The outline of a color border is sharp since adjacent pixels do not blend. However, the outline may become jagged depending on the content being transformed.
Emphasize outline *	The outline of a color border is smooth since adjacent pixels blend. The outline is processed in such a way as to be more emphasized than with [Smooth] after a [Rotate] or [Free transform]. However, white noise may appear around the outline depending on the content being transformed.

Ink

Allows you to configure the amount and/or density of the paint to apply, how to mix or stretch colors and the like. It also allows you to configure opacity.

Important

The following items are not available for [Vector] layers and layers whose [Expression color] is [Monochrome].

- **Mix ground color**
- **Amount of paint**
- **Density of paint**
- **Color stretch**
- **Intensity of blur**

Important

Some settings may not display depending on the selected tool or sub tool.

(1) Opacity

Configures the opacity of the drawing. A slider allows you to change the setting. You can also change the setting by using the up and down arrow icons next to the value box.

Important

[Opacity] is not available when using the [Fill] tool, [Dot pen] sub tool or [Lasso fill] tool to draw on a layer whose [Expression color] is [Monochrome].

(2) Combine mode

Allows you to configure the effect a color used afterwards has on a color used before on the same layer. Select one from the combine modes described below. This setting is available when [Mix ground color] is turned off.

Normal	Overlaps the drawing color used in the upper layer as-is to the drawing colors used in the lower layer.
Darken	Compares the drawing colors used in the lower layer with that used in the upper layer and replaces the colors in the lower layer with the darker one.
Multiply	Multiplies the drawing colors used in the lower layer by that used in the upper layer. After combine, the colors are darker than the originals.
Color burn	Produces an effect similar to the "burn" in silver halide photography. The drawing colors used in the lower layer are first darkened to enhance contrast and then, combined with that used in the upper layer.
Linear burn	The drawing colors used in the lower layer are first darkened and then, combined with that used in the upper layer.
Black burn	Darkens the drawn area producing an effect similar to underexposure in photography. The effect does not apply to areas of the lower layer drawn in transparent.
Subtract	Subtracts the drawing colors used in the lower layer and that used in the upper layer. After combine, the colors are darker than the originals.
Lighten	Compares the drawing colors used in the lower layer with that used in the upper layer and replaces the colors in the lower layer with the brighter one.
Screen	The drawing colors used in the lower layer are first inverted and then, multiplied by that used in the upper layer. After combine, the colors are brighter than the originals.

Color dodge	As with "dodge" in silver halide photography, brightens the colors used in the lower layer to decrease contrast.
Glow dodge	Produces stronger effect on semi-transparent areas than [Color dodge].
White burn	Brightens the drawn area producing an effect similar to overexposure in photography.
Add	Adds the drawing colors used in the lower layer and that used in the upper layer. After combine, the colors are brighter than the originals.
Add (Glow)	Produces stronger effect on semi-transparent areas than [Add].
Overlay	Combines by applying [Multiply] or [Screen] depending on the overlapped colors. After combine, bright areas are brighter and dark areas, darker.
Soft light	Produces different results depending on the density of the overlapped colors. When colors brighter than 50% grayscale are overlapped, the result is brighter than the originals, as in dodge. When colors darker than 50% grayscale are overlapped, the result is darker than the originals, as in burn. When 50% grayscale colors are overlapped, the lower layer remains unchanged, as before the overlap. Areas not overlapping with colored areas become white.
Hard light	Produces different results depending on the density of the overlapped colors. When colors brighter than 50% grayscale are overlapped, the result is brighter than the originals, as with [Screen]. When colors darker than 50% grayscale are overlapped, the result is darker than the originals, as with [Multiply]. When 50% grayscale colors are overlapped, the lower layer remains unchanged, as before the overlap. Areas not overlapping with colored areas become white if a color brighter than 50% grayscale is selected, and the selected color if a color darker than 50% grayscale is selected.
Difference	Subtracts the drawing colors used in the lower layer and that used in the upper layer and replaces the colors in the lower layer with the absolute value of the difference.
Erase	The drawing is erased.
Background	Places the color used afterwards below those used before. The color used afterwards becomes the color used before.
Replace alpha	Color is used in such a way that the opacity of the image becomes the same as the opacity configured in the [Sub tool detail] palette. Overlapping the color configured in [Replace alpha] to the colors used before also makes the opacity of the drawn areas equivalent to the opacity configured in the [Sub tool detail] palette.
Compare density	Paints only when the opacity of the color used in the upper layer is higher than that of the lower layer.
Erase (compare)	Erases the drawing only when the result of subtracting the opacity of the color used in the upper layer from 100 is smaller than the opacity of the color used in the lower layer.

(3) Mix ground color

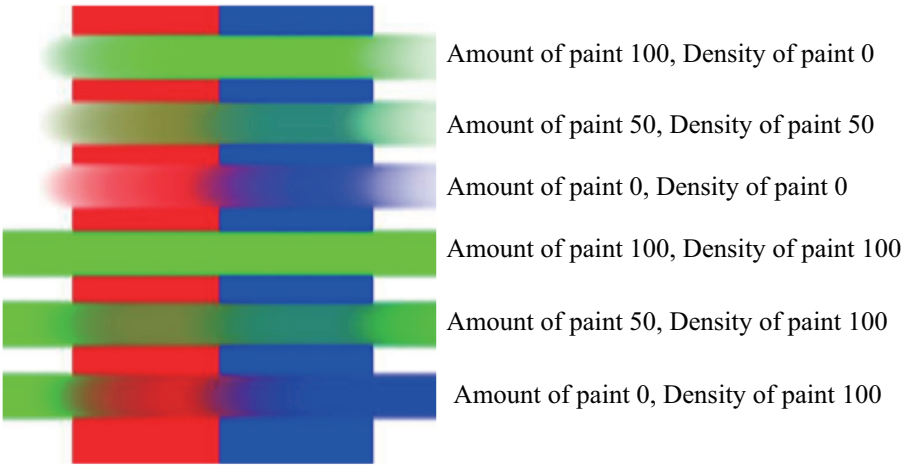
When turned on, allows you to paint by mixing the already used colors as in water coloring.

Mix color	Mixes the already used colors and paints by adding the drawing color.
Running color	Blurs the already used colors and then, paints by adding the drawing color. It allows you to create a running color effect.

(4) Amount of paint

Configures the amount of paint for the drawing color. Amount of paint is the ratio for mixing the RGB components of the drawing color with the ground color (color already painted on the layer). The larger the value, the higher will be the ratio of RGB components in the drawing color. The [Affected by] button allows you to select the settings of the tablet and the like which affect the amount of paint. This setting is available when [Mix ground color] is turned on.

For [Affected by], see "Effect source settings" .


Amount of paint 100, Density of paint 0
Amount of paint 50, Density of paint 50
Amount of paint 0, Density of paint 0
Amount of paint 100, Density of paint 100
Amount of paint 50, Density of paint 100
Amount of paint 0, Density of paint 100

(5) Density of paint

Configures the density of paint for the drawing color. Density of paint is the ratio of the transparency component in the ground color (color already painted on the layer) and that of the drawing color. The larger the value, the higher will be the ratio of the transparency component in the drawing color. The [Affected by] button allows you to select the settings of the tablet and the like which affect the density of paint. This setting is available when [Mix ground color] is turned on.

For [Affected by], see "Effect source settings" .

(6) Color stretch

Adjusts how much to keep the color at the start of the stroke when drawing. This setting is available when [Mix ground color] is [Mix color] or [Running color].

- The smaller the value, the shorter will be the length for blending with the surrounding color.
- The larger the value, the longer will be the length for blending with the surrounding color.

(7) Intensity of blur

Configures the way the already painted color will run when [Running color] is configured for [Mix ground color].

Automatic	The already painted color will run in conjunction with the line thickness.
Fixed	The already painted color will run as specified by the slider or input value.

(8) Fixed intensity of blur

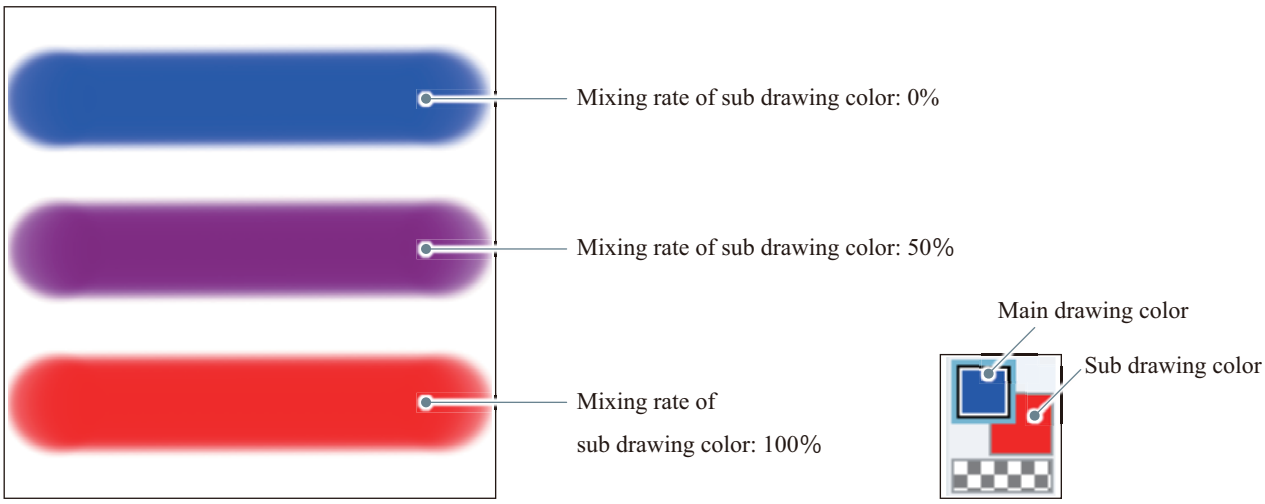
Specifies how strong the already painted color will run when [Fixed] is configured for [Intensity of blur]. The [Affected by] button allows you to select the settings of the tablet and the like which affect the intensity of blur.

For [Affected by], see "Effect source settings" .

(9) Mixing rate of sub drawing color

Combines the main drawing color and sub drawing color for drawing. The larger the value, the higher will be the ratio of the sub drawing color. The [Affected by] button allows you to select the settings of the tablet and the like which affect the mixing rate of sub drawing color.

For [Affected by], see "Effect source settings" .


Mixing rate of sub drawing color: 0%
Mixing rate of sub drawing color: 50%
Mixing rate of
sub drawing color: 100%
Main drawing color
Sub drawing color

(10) Drawing target (When [Gradient] tool is selected)

Specifies the target layer when drawing with the [Gradient] tool.

Draw on editing layer	Applies gradation directly to the selected layer.
Create gradient layer	Creates a new layer to apply gradation. When gradient layer is used, you will be able to edit the gradation angle and position even after drawn.

L

Light Source

Allows you to configure the light source when a 3D material is selected with the [Object] sub tool.

Memo **The light source cannot be configured when a 3D background material is selected.**

(1) Light Source

Allows you to expose a 3D material to a light source when turned on.

Light source: OFF

Light source: ON

(2) Direction of light source

Allows you to configure the orientation of the light source by dragging a circle.

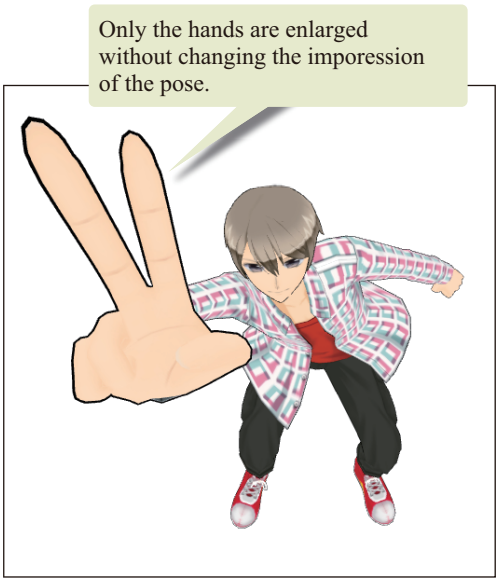
M

Manga perspective

Allows you to configure a manga-like perspective with the depth emphasized when editing a 3D character or 3D drawing doll.

(1) Manga perspective

Allows you to configure a manga-like perspective with the depth emphasized for a 3D character material or 3D drawing doll. Unlike [Perspective] of the [Camera] category, you can emphasize the expression of the depth without changing the impression of the pose.



Manga Perspective

Perspective

When this item is turned on, you can adjust the strength of the effect of manga-perspectives by slider. The larger the value is, the stronger will be the effect.

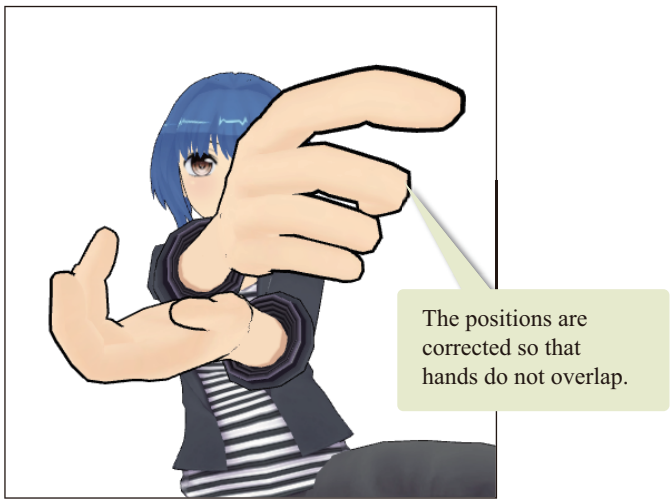
Manga Perspective: OFF

Manga Perspective: ON

(2) Collision correction

Turning this on corrects the collision parts so that they do not overlap when [Manga perspective] is turned on.

Collision correction: OFF



Collision correction: ON

Marquee

Allows you to configure how to create a selection when using a tool or sub tool for creating a selection area.

(1) How to create

Allows you to configure how to create a new selection when there is already one.

Select new	Creates a new selection.
Select aditionally	Adds the selected area to an already existing selection.
Deselect partially	Removes the selected area from an already existing selection.
Select selected one	Creates a selection from the area overlapping a selected area.

(2) Coordinating selection and image

When turned on, dragging and moving a selected area also moves the image within the selected area.

Mesh

Allows you to configure the number of lattices for a mesh transform by [Edit] menu → [Transform] → [Mesh].

(1) Number of horizontal lattice points

Displays guides with the configured number of lattice points (handles) in the horizontal direction of the selected image.

(2) Number of vertical lattice points

Displays guides with the configured number of lattice points (handles) in the vertical direction of the selected image.

Move

Allows you to configure how to move a layer when using the [Layer move] tool.

(1) Object to move

Selects the type of the layer to be moved.

Layer	Moves a layer.
Halftone dots of tone	Moves the halftone dots of tone. The range where tone is attached does not change.
Grid ruler	Moves grids and rulers.

(2) Move the object at the clicked position

Moves the layer with a drawing in the clicked position.

(3) Move layers in the selected area

Moves the layer with a drawing within the selected area.

(4) Change the status of the object to move to selected

Selects layers with a drawing in the clicked position and layers with a drawing in the selected area.

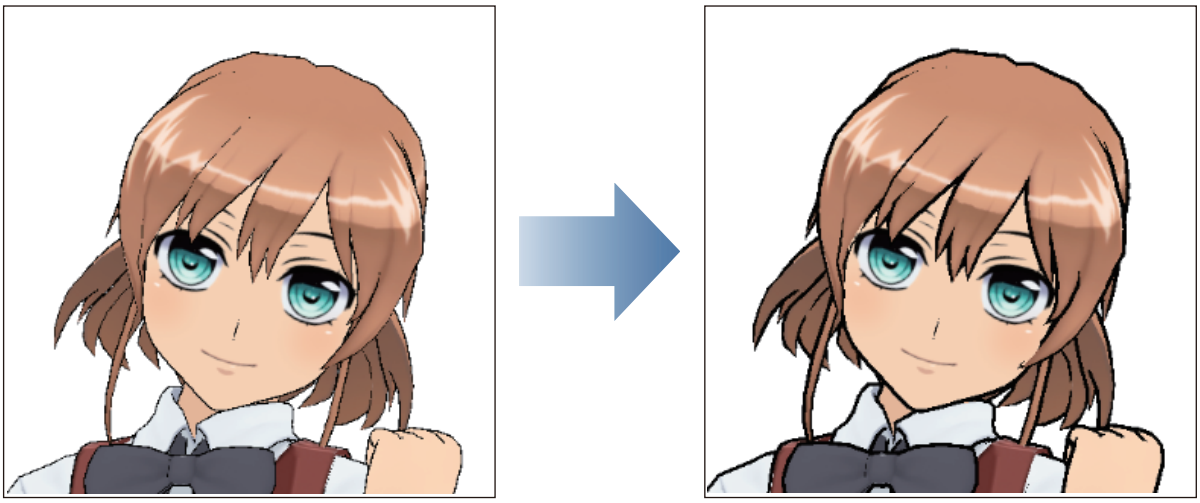
O

Outline

Allows you to configure the outline when a 3D material is selected with the [Object] sub tool, for example.

(1) Outline width

Configures the outline for the 3D item material. The larger the value, the thicker will be the outline.



(2) Opacity

Configures the opacity of the outline. The larger the value, the higher will be the opacity of the outline.

(3) Color

Configures the drawing color of the outline. Clicking the color indicator displays the dialog box for selecting a color.

P

Perspective ruler

Displayed items vary depending on the selected tool or sub tool.

→ "When the Object sub tool is selected"

→ "When the Perspective ruler sub tool is selected"

When the Object sub tool is selected

Allows you to configure how to display the ruler or snap to ruler and the like when a perspective ruler is selected with the [Object] sub tool.

(1) Snap

When turned on, snap to a perspective ruler is enabled. When another special ruler is displayed on the same canvas, snap to other ruler is disabled.

Memo

Clicking the ? handle on the perspective ruler allows you to enable/disable snap to all perspective rulers or each guide.

(2) Fix eye level

Configures the eye level operation. When turned on, the vanishing point moves along the eye level. When turned off, the position of the eye level moves in conjunction with the vanishing point.

Memo

Eye level is a line that represents the height at which the line of vision or camera is located. A horizontal vanishing point is placed at the eye level.

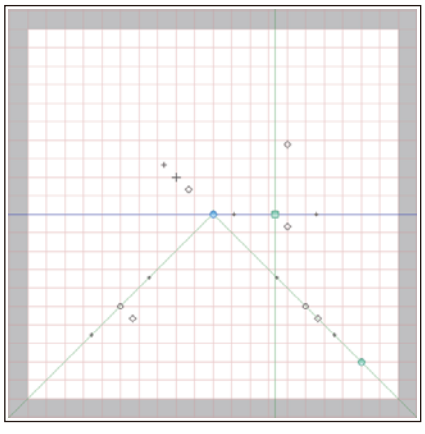
(3) Grid

Displays equally-spaced (auxiliary lines) from the vanishing point. The grid displayed by each button is different.

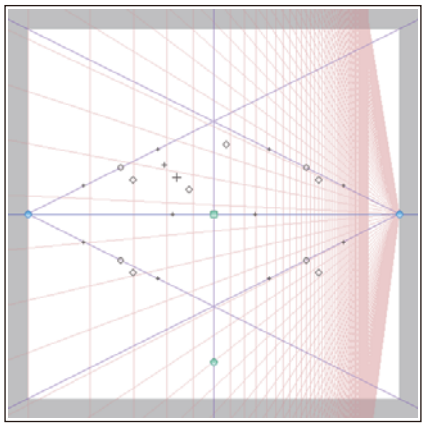
Memo

- **Grids may not display depending on where the vanishing point has been placed.**
- **To snap to the grid, turn on snap by selecting [View] menu → [Snap to grid].**

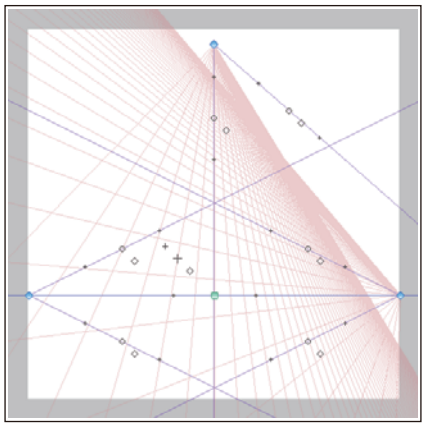
XY plane



One-point perspective

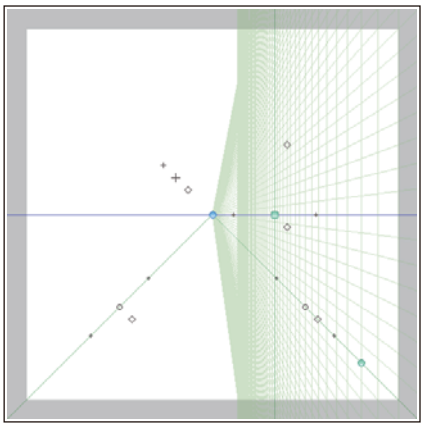


Two-point perspective

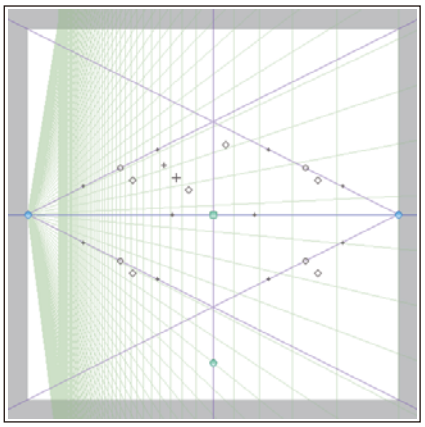


Three-point perspective

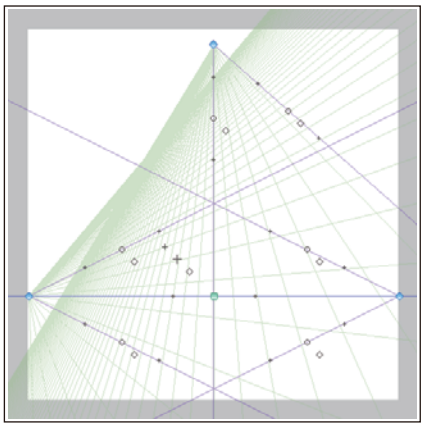
YZ plane



One-point perspective

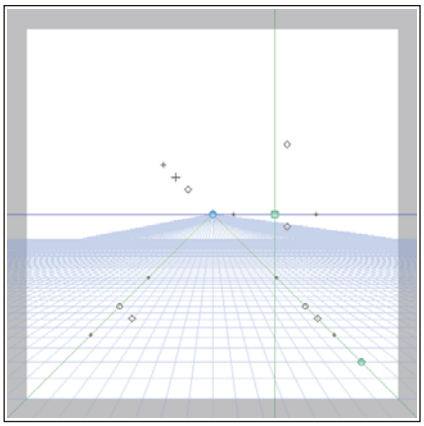


Two-point perspective

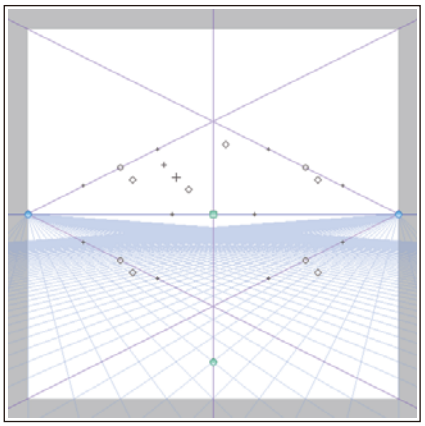


Three-point perspective

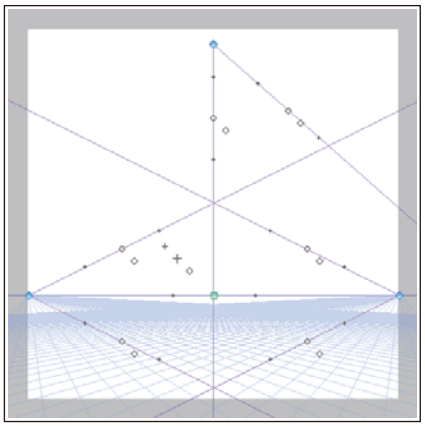
XZ plane



One-point perspective



Two-point perspective



Three-point perspective

(4) Grid size

Specifies the size (distance) between grid lines. The larger the size, the wider is the area where the grid displays.

When the Perspective ruler sub tool is selected

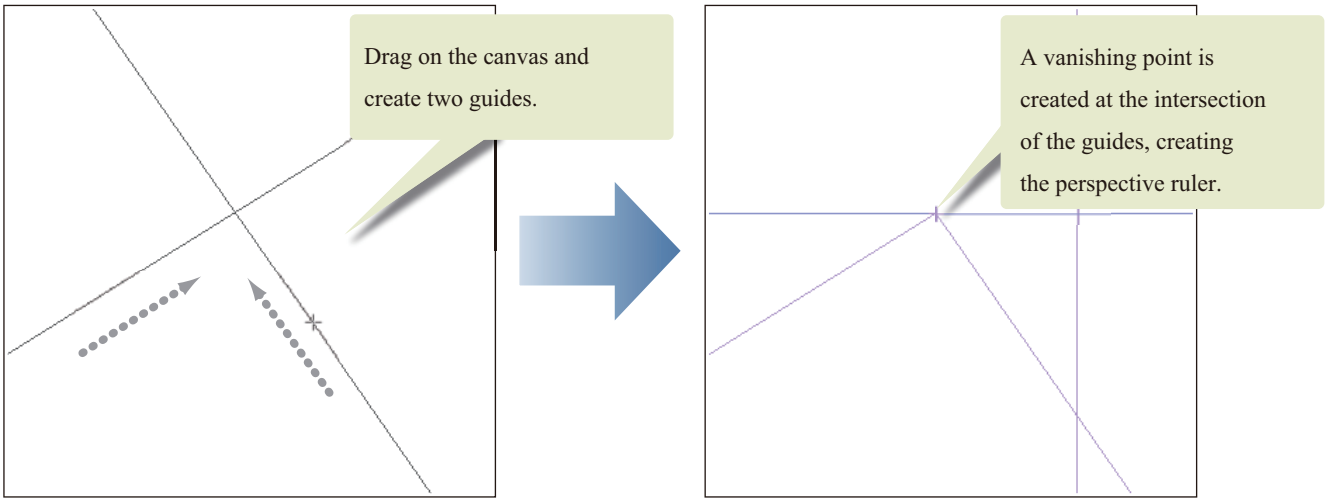
Allows you to configure the vanishing point, guide and the like for the perspective ruler. Furthermore, it allows you to create a new perspective ruler.

(1) Content of process

Configures how to edit the perspective ruler. Allows you to edit the vanishing point, guides and the like.

Add vanishing point

Adds a vanishing point to the perspective ruler. Drag on the canvas and create two guides. The vanishing point will be added at the intersection of the guides. Creates a new perspective ruler when there is none.

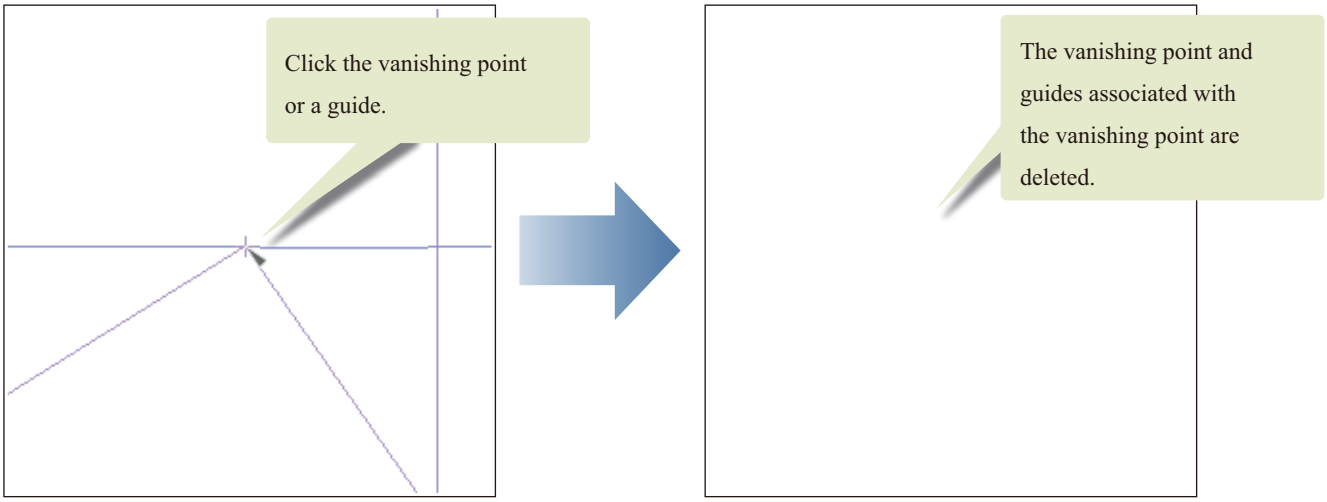

Drag on the canvas and create two guides.
A vanishing point is created at the intersection of the guides, creating the perspective ruler.

Memo

Creating two parallel guides creates a perspective ruler with the vanishing point at infinity. To create parallel guides, create the guides with the [Shift] key held down. It allows you to match the angles easily as the angle of the guides will vary in steps of 45°.

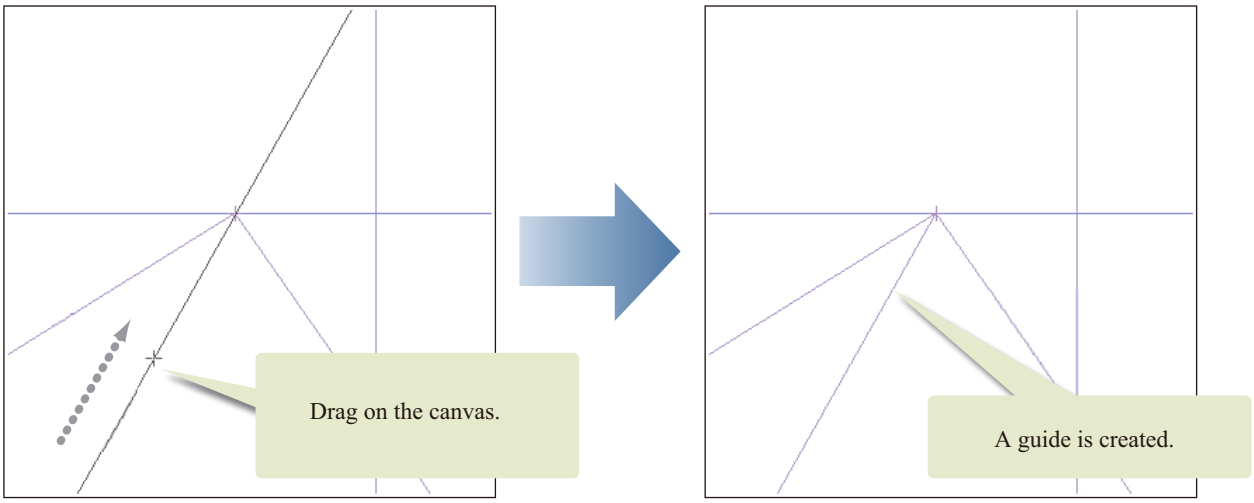
Delete vanishing point

Deletes a vanishing point from the perspective ruler. To delete a vanishing point, click the vanishing point or a guide.



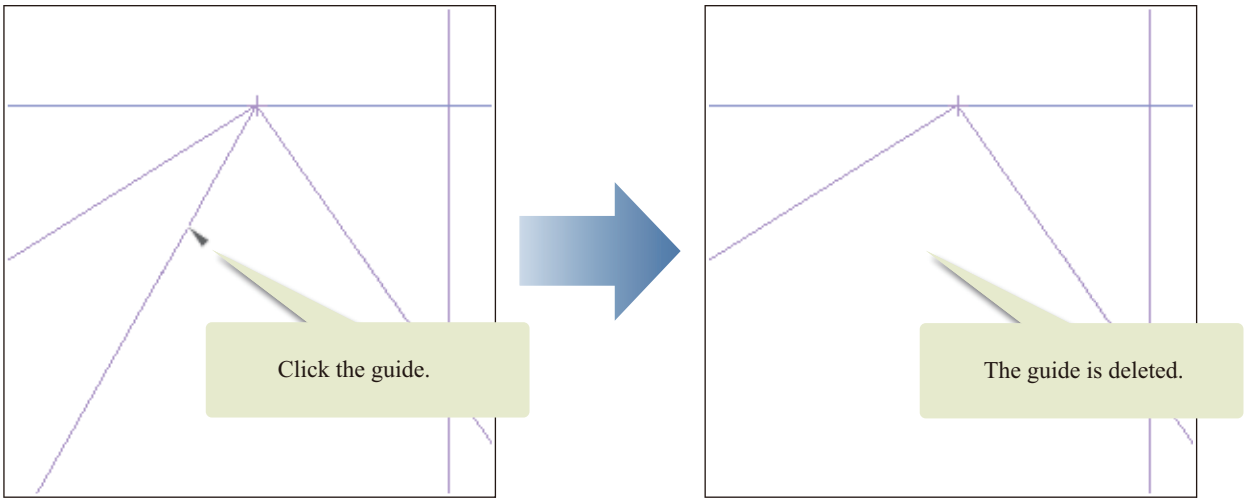
Add guide

Adds a guide to the perspective ruler. Dragging on the canvas adds a guide up to the closest vanishing point in the dragged direction.



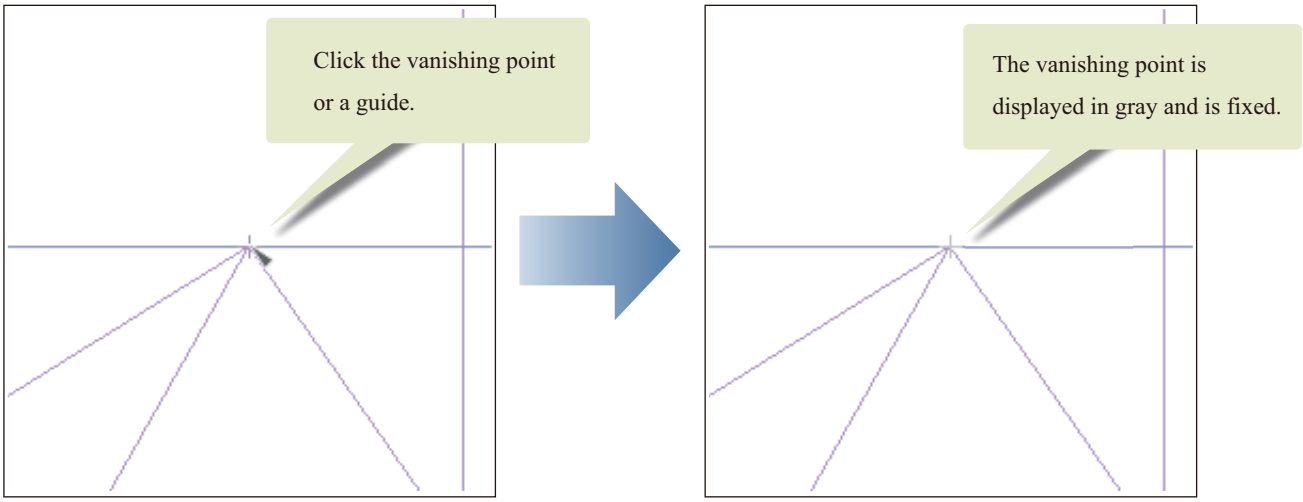
Delete guide

Deletes a guide from the perspective ruler. To delete a guide, click the guide.



Fix vanishing point

Fixes the vanishing point. To fix, click the vanishing point or a guide.

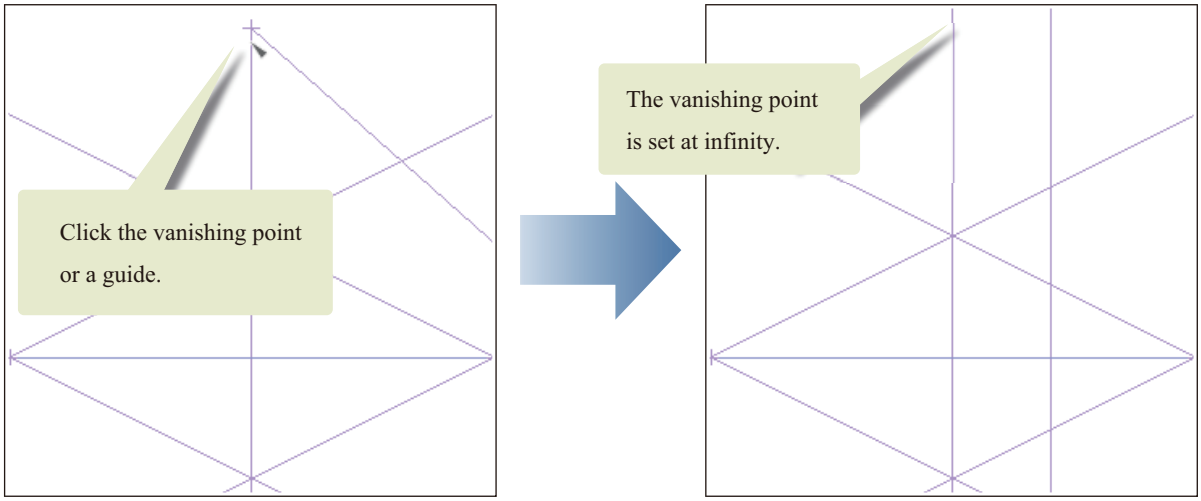


Memo

To free the vanishing point, configure [Fix vanishing point] for [Content of process] and click the fixed vanishing point or a guide again.

Infinitize

Places the vanishing point at infinity. To set to infinity, click the vanishing point or a guide.

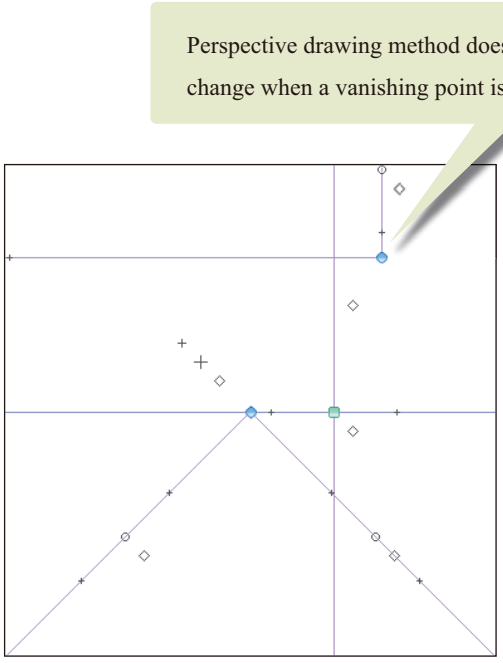


(2) Change perspective drawing method

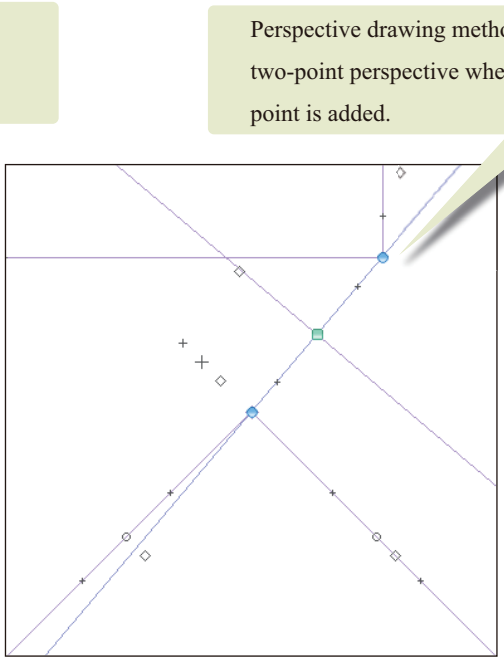
When turned off, allows you to add an auxiliary vanishing point without changing the perspective drawing method.

When turned on, adding a vanishing point to an existing perspective ruler with the [Perspective ruler] sub tool changes the perspective drawing method.

- Adding a vanishing point to a one-point perspective ruler changes the ruler to a two-point perspective ruler.
- Adding a vanishing point to a two-point perspective ruler changes the ruler to a three-point perspective ruler.



Change perspective drawing method: OFF



Change perspective drawing method: ON

(3) Create at editing layer

When turned on, creates the perspective ruler on the edited layer.

Memo **[Create at editing layer] is available only when [Add vanishing point] is configured for [Content of process].**

Pinch line

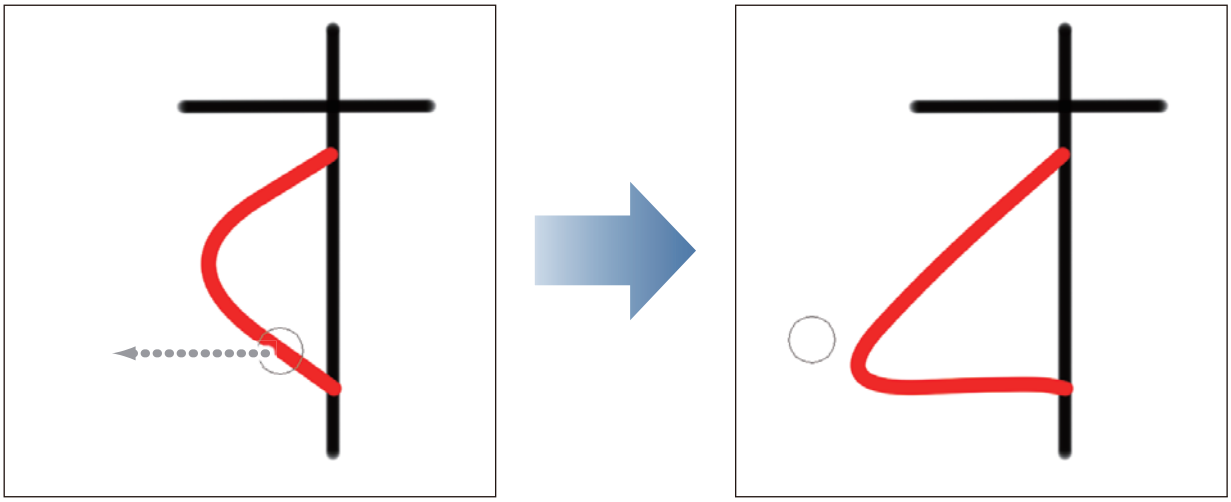
Allows you to configure how a line is pinched, or the pinch area when a [Vector] layer or [Balloon] layer is selected with the [Pinch vector line] tool.

(1) Fix end

Allows you to select whether or not and how to fix the starting point and/or end point when transforming a line.

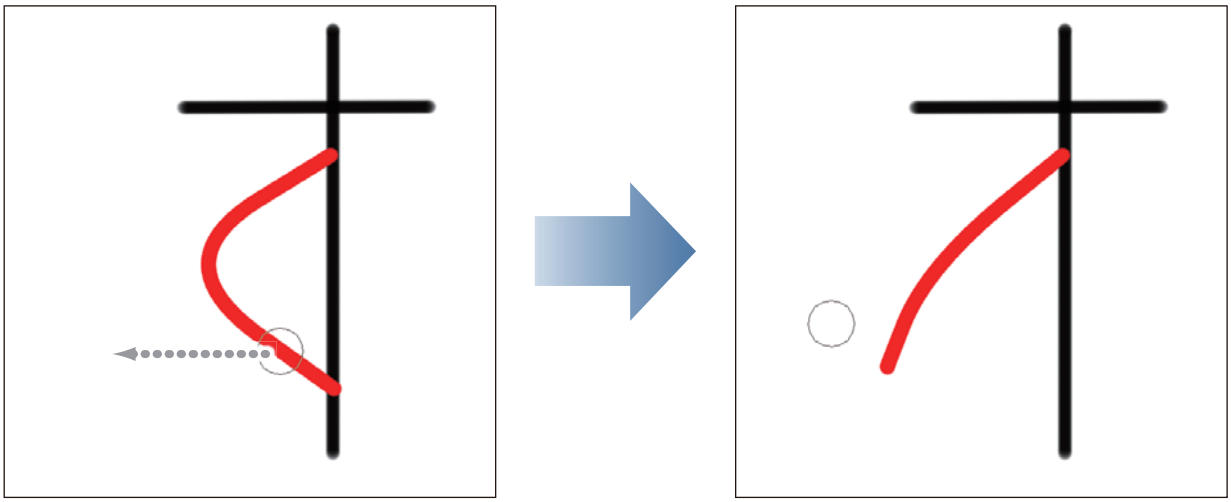
Fix both ends

Fixes both starting and end points of the line. The starting point and end point do not move even if the line is pinched.



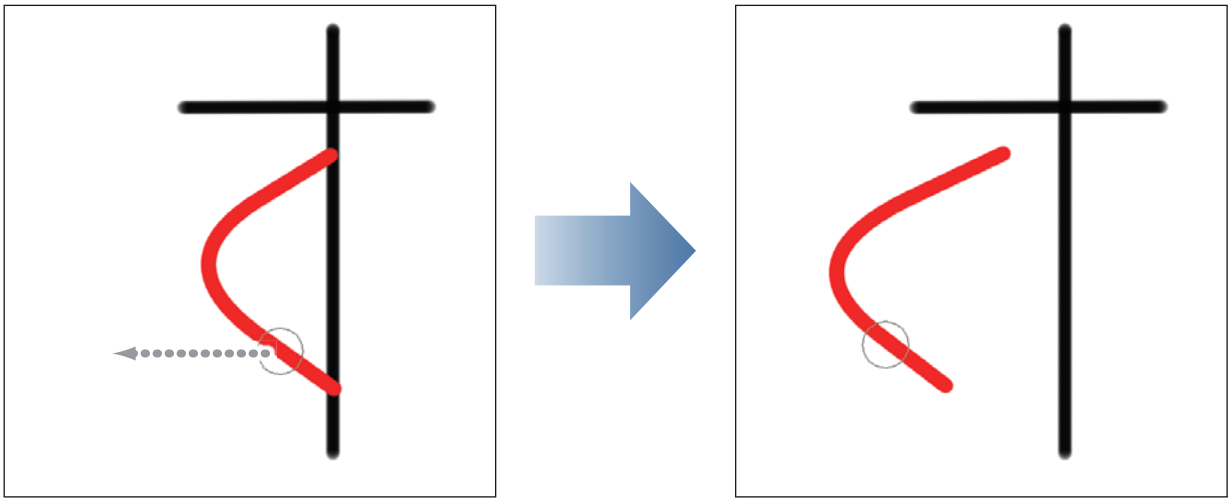
Fix either end

Fixes the opposite end from the point where the line will be reshaped. The end that is fixed does not move even if the line is pinched.



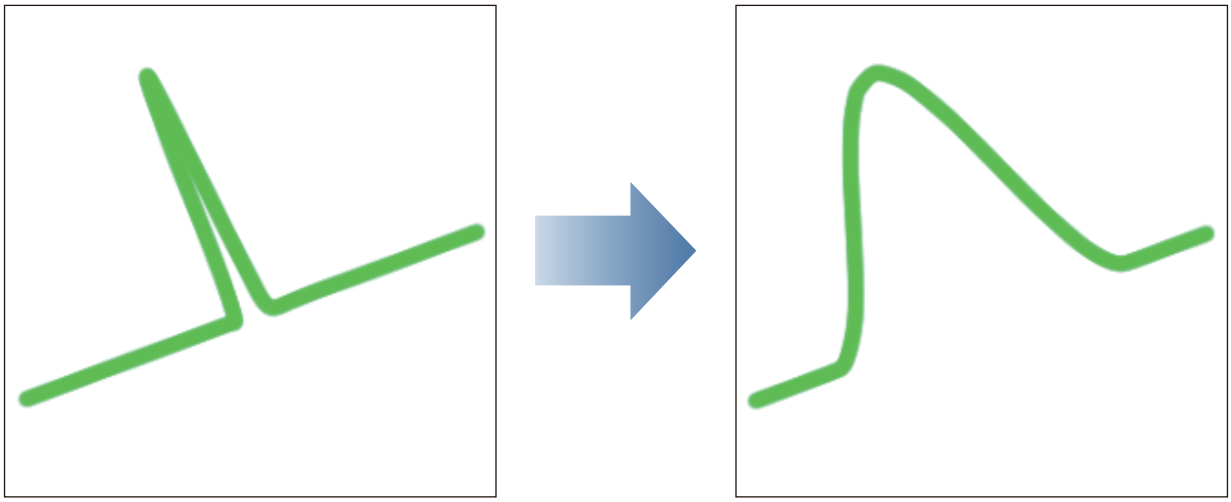
Free both ends

Both starting point and end point of the line can move. When the line is pinched, both the starting point and end point may move depending on the value of [Pinch level].



(2) Pinch level

Configures the length of the line affected by Pinch line. When the value is small, the portion affected by Pinch line is limited. When the value is large, the entire line may be transformed.



Pinch level: 5

Pinch level: 15

(3) Pen pressure

When turned on, [Pinch level] changes in accordance with the pen pressure on the tablet.

(4) Pinch area

Specifies the area affected by Pinch line at the time the line starts to be dragged. The larger the value, the farthest the effect will reach.

(5) All layers

When turned on, allows you to operate all lines drawn on all displayed vector/balloon/frame border/ruler layers. Clicking a line drawn on another layer switches the edited layer.

When turned off, operation is enabled only for lines drawn on the vector/balloon/frame border/ruler layer being edited.

(6) Add control point

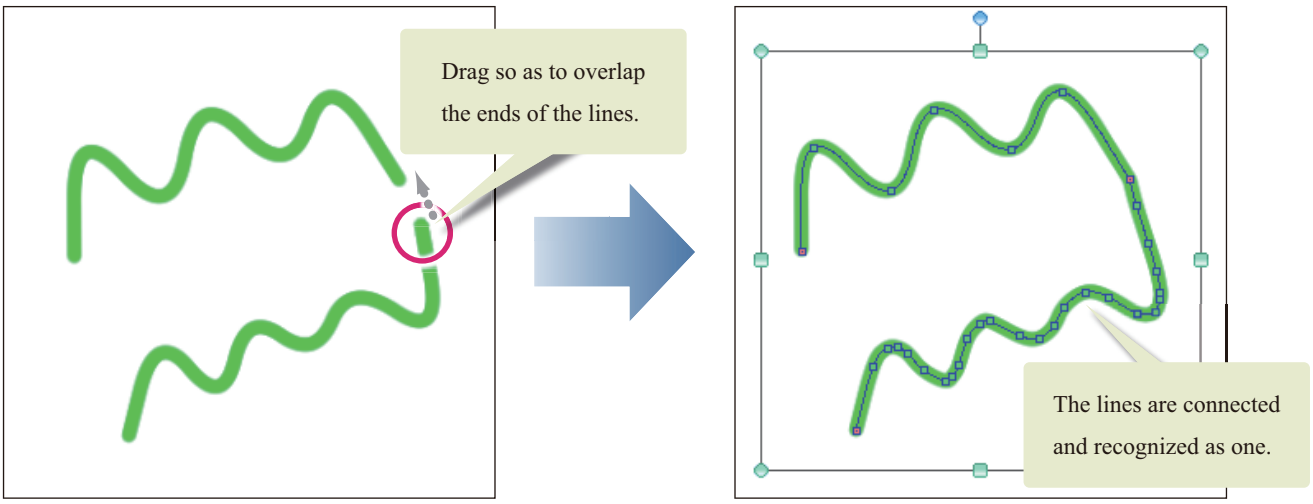
Depending on the pinched point and distance between control points, the shape of the line may become irregular after transform.

When turned on, control points are added during transform making it more difficult to become irregular after transform.

When turned off, no control points are added. This setting allows you to transform straight lines by keeping its shape.

(7) Connect line

When turned on, two neighboring segments of lines with the same settings for the pen tip shape, angle, color, and so on are connected. Dragging in such a way as to overlap the ends of both segments when pinching a line, connects the two segments.



(8) Snap to symmetrical ruler

When turned on, the pinched line is snapped to the symmetrical ruler and other lines are changed in conjunction with it.

When turned off, only the pinched line is changed.

Pose

Allows you to configure a pose and the like when a 3D character material or 3D pose model material is selected with the [Object] sub tool, for example.

(1) Initial pose

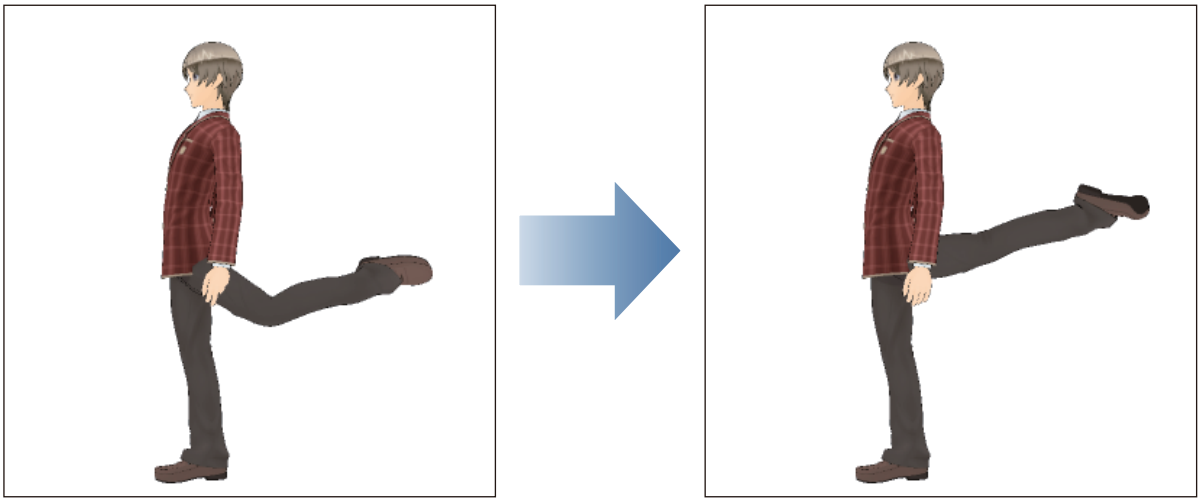
When clicked, resets the pose settings to the initial pose.

(2) Flip horizontal

When clicked, horizontally reverses the pose of the 3D character material.

(3) Joint angle limit

When turned on, the bending angle of [Bones] are restricted in a similar way as human joints. When turned off, [Bones] can bend in any direction.



Joint angle limit: ON

Joint angle limit: OFF

(4) Hand setup

Allows you to assign poses to the hands. For the functions of each part of [Hand setup], see "Explanation: 3D Materials" in "MANGA Studio User Guide".

Preference

Allows you to configure the operation for 3D materials and the like when you have a 3D material selected with the [Object] sub tool, for example.

(1) Manipulator

When turned on, displays a [Manipulator] for the selected part of the 3D character material. Dragging the [Manipulator] allows you to create a pose for the 3D character material, change the angle of a 3D item material, and so on.

Aligning the mouse cursor with each ring and dragging it along the ring allows you to rotate the selected part in the direction of the ring.

(1) Twisted rotation	Drag along the [Red] ring. Rotates the selection in the direction of the ring.
(2) Bending rotation (Blue)	Drag along the [Blue] ring. Rotates the selection in the direction of the ring.
(3) Bending rotation (Green)	Drag along the [Green] ring. Rotates the selection in the direction of the ring.

Memo

[Twisted rotation], [Bending rotation (Blue)] and [Bending rotation (Green)] are displayed only when rotation is possible in the relevant direction.

R

Reading

Allows you to configure settings related to annotative glosses indicating the pronunciation (reading).

Memo

- **To configure [Reading], turn on [Use drawing compatible with IllustSudio/Manga Studio 4.0] under [File] → [Text] on the [Preferences] dialog box that displays when [File] menu ([Manga Studio 5.0] menu in Mac OS X version) → [Preferences] is selected.**
- **The unit of [Reading adjustment], [Distance between reading and text] and [Reading letter spacing] can be toggled between points (pt) and Q. It is configured in [Ruler/Frame/Unit] → [Unit] on the [Preferences] dialog box that displays when [File] menu ([Manga Studio 5.0] menu in Mac OS X version) → [Preferences] is selected.**

(1) Reading setting

Allows you to configure reading for a specified text. It also allows you to delete a configured reading.

Selecting and clicking a text to configure/delete the reading displays a pop up dialog box for configuring the reading. Clicking outside the pop up commits the setting.

[Reading setting] Pop up Dialog Box

(1) Target string	Displays the selected text.
(2) Reading string	Input how to read the text.
(3) Delete	Deletes the reading.

Memo

[Reading setting] is not available if a text is not selected.

(2) Reading font

Select the font to use for the reading.

(3) Reading size(%)

Configure the size of the letters to be used for indicating the reading. Specify the size as a ratio (%) of the letter size.

(4) Reading position

Select the reading display position from [Top align], [Center align] and [End align].

(5) Adjust reading

Adjusts the reading display position by point or Q. Configure the displacement from the alignment position selected in [Position of reading].

(6) Distance between reading and main text

Adjusts the distance between the reading and the text by point or Q.

(7) Reading space

Auto-arranges the space between the reading letters by distributing them evenly. Select one from [Even 1], [Even 2], [Even 3] and [Free]. Selecting [Free] allows you to specify the [Word space] in points.

(8) Word space

Specify the space between reading letters in points or Q.

Font List *

This is a screen displayed when selecting a font. It allows you to configure settings such as switching of the [Font list] to display, method of displaying the fonts, and so on.

(1) Font list

Displays a list of available fonts.

Memo **To display more fonts in the [Font list], resize it by dragging one of the edges.**

(2) Display font name

Displays only the font name on the [Font list].

(3) Display font name in specific font

Displays each font name on the [Font list] using the corresponding font.

(4) Display text in specific font

Previews the selected text on the [Font list]. Sample alphanumeric characters and hiragana are displayed if a text is not selected.

(5) Switch font list

Switches the [Font list] to display. You can create and edit the [Font list] with the [Settings of font list] dialog box that displays when you click [Settings of font list]. For details on the [Settings of font list] dialog box, see "[Settings of font list] Dialog Box *" .

(6) Settings of font list

Displays the [Settings of font list] dialog box, which allows you to configure a [Font list]. For details on the [Settings of font list] dialog box, see "[Settings of font list] Dialog Box *" .

[Settings of font list] Dialog Box *

A dialog box that displays when [Settings of font list] is clicked. Allows you to manage, such as create, edit, and delete [Font lists].

(1) Font list

Displays a list of [Font lists].

(2) New

Creates a new [Font list]. When clicked, adds a [Font list] to the list of [Font lists] and at the same time, enables the selection of fonts from [Available fonts].

(3) Change name

Changes the name of the [Font list] selected on the list of [Font lists].

Memo **You can also change the name of a [Font list] by double clicking its name on the list of [Font lists].**

(4) Duplicate

Makes a copy of the [Font list] selected on the list of [Font lists].

(5) Delete

Deletes the [Font list] selected on the list of [Font lists].

(6) Available fonts

Allows you to select a font to display on the [Font list]. Selecting a [Font list] from the list of [Font lists] and turning on the check box of the font to display adds the font to the [Font list].

Memo

- **If [Available fonts] is displayed empty, select the [Font list] from the list of [Font lists].**
- **To display more fonts in [Available fonts], resize it by dragging one of the edges.**

(7) Display font name

Displays only the font names on [Available fonts].

(8) Display font name in specific font

Displays each font name on [Available fonts] using the corresponding font.

(9) Select all

Selects all fonts displayed on [Available fonts].

(10) Deselect all

Deselects the selection of all of the fonts displayed on [Available fonts].

Redraw

Allows you to configure the following on the [Sub tool detail] palette when using the [Redraw vector line] sub tool.

(1) Fix end

Allows you to select whether or not and how to fix the starting point and/or end point when transforming a line.

Fix both ends	Fixes both starting and end points of the line. The starting point and end point do not move even if the line is redrawn.
Fix either end	Fixes the opposite end from the point where the line will be reshaped. The end that is fixed does not move even if the line is redrawn.
Free both ends	Both starting point and end point of the line can move.

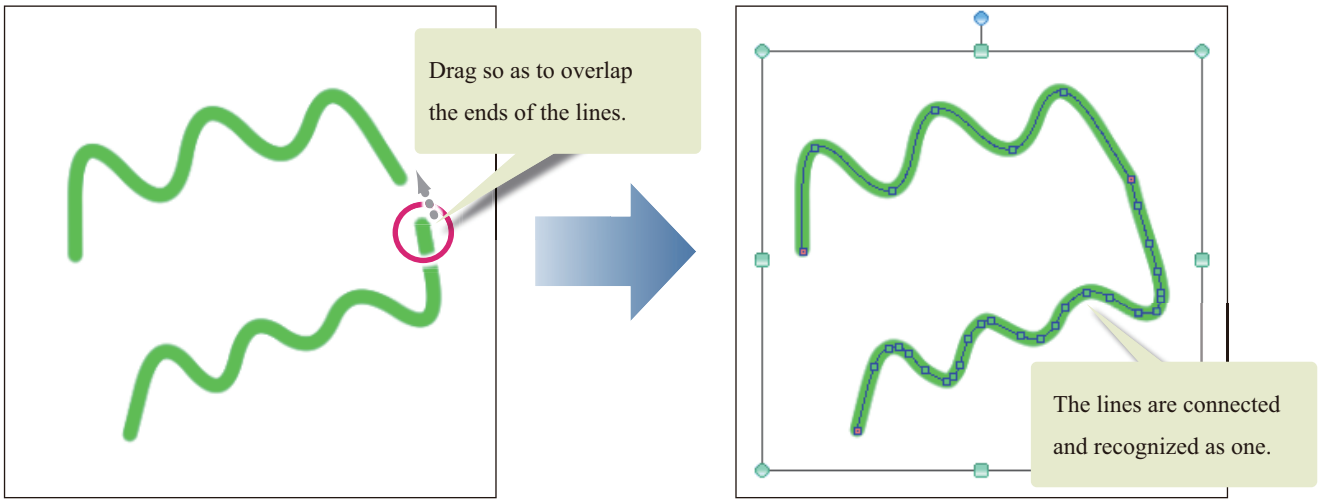
(2) All layers

When turned on, allows you to operate all lines drawn on all displayed vector/balloon/frame border/ruler layers. Clicking a line drawn on another layer switches the edited layer.

When turned off, operation is enabled only for lines drawn on the vector/balloon/frame border/ruler layer being edited.

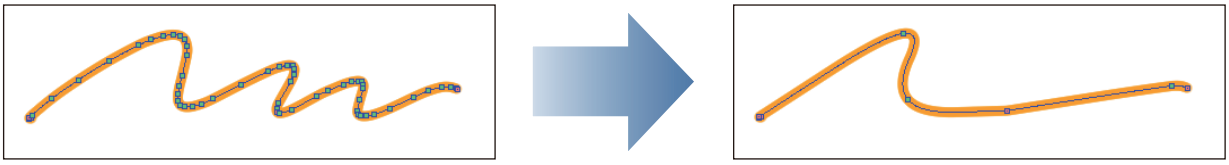
(3) Connect line

When turned on, connects two neighboring segments of line with the same settings for pen tip shape, angle, color and the like. Dragging in such a way as to overlap the ends of both segments when redrawing the line, connects the two segments.



(4) Simplify

When turned on, allows you to simplify a line by reducing the number of control points. A slider allows you to configure how much control points to reduce. The larger the value, the more control points will be removed.



Redraw line width

Allows you to configure the following on the [Sub tool detail] palette when using the [Redraw vector line width] sub tool.

(1) Brush size

Configures the width of the line after it is redrawn. A slider allows you to change the setting. The [Affected by] button allows you to make settings to reflect the pen pressure in the drawing size.

For [Affected by], see "Effect source settings" .

(2) Specify by size on screen

Makes the width of the redrawn line displayed on a scaled up/down canvas appear the same as when the canvas is displayed at 100%.

Remove dust

Allows you to configure the dust size, how to process dust and the like when using the [Remove dust] sub tool.

(1) Size of dust

Specifies the maximum size for an object to be recognized as dust.

(2) Mode

Displayed settings vary depending on whether the sub tool is to be used to filter dust or to create a selection area from dust.

When filtering dust

Configure the color of points to erase and how to erase.

Delete opaque point	Small opaque and translucent spots in transparent areas are recognized as dust. Dust is replaced by transparent color.
Delete point in white background	Small non-white spots in areas completely painted in white are recognized as dust. Dust is filled with white.
Fill transparent hole with color of background	Small transparent and translucent spots in opaque areas are recognized as dust. Dust is filled with the color predominant around it.
Fill transparent hole with drawing color	Small transparent and translucent spots in opaque areas are recognized as dust. Dust is filled with the drawing color.

When selecting dust

Configure the color of the points to select.

Select opaque point	Small opaque and translucent spots in transparent areas are selected as dust.
Select spots in white background	Small non-white spots in areas completely painted in white are selected as dust.
Select transparent hole	Small transparent and translucent spots in opaque areas are selected as dust.

Rotate

Allows you to configure the following on the [Sub tool detail] palette when using the [Rotate] sub tool.

(1) Step of angle

When turned on, allows you to configure the angle by which the object will rotate each time. Clicking ▼ on the right allows you to select an angle from a list.

(2) Level off by double-click

When turned on, double clicking the canvas after a rotation reverts to the original angle (0 degrees)

Ruler

Allows you to configure snap to ruler and the like when you have a ruler selected with the [Object] sub tool.

(1) Snap

When turned on, drawing snaps to a ruler.

S

Saturated line *

Displayed items vary depending on the selected tool or sub tool.

→ "When the Saturated line sub tool or Flash sub tool is selected"

→ "When the Object sub tool is selected"

When the Saturated line sub tool or Flash sub tool is selected

Allows you to configure the destination layer for the saturated line, angle and the like when the [Saturated line] sub tool or [Flash] sub tool is selected.

(1) Destination layer

Allows you to select the destination layer for the saturated line.

Draw on editing layer	Draws the saturated line on the selected layer. When a [Saturated line] layer is selected, allows you to redraw the reference line while keeping the settings of the already drawn saturated line.
Always create saturated line layer	Creates a new [Saturated line] layer to draw the saturated line.
Draw on saturated line layer	When a [Saturated line] layer is selected, allows you to redraw the reference line while keeping the settings of the already drawn saturated line. When other than a saturated line layer is selected, creates a new saturated line layer to draw the saturated line.

Memo **When drawn on a [Saturated line] layer, the settings of a saturated line can be changed even after drawn.**

(2) Toning

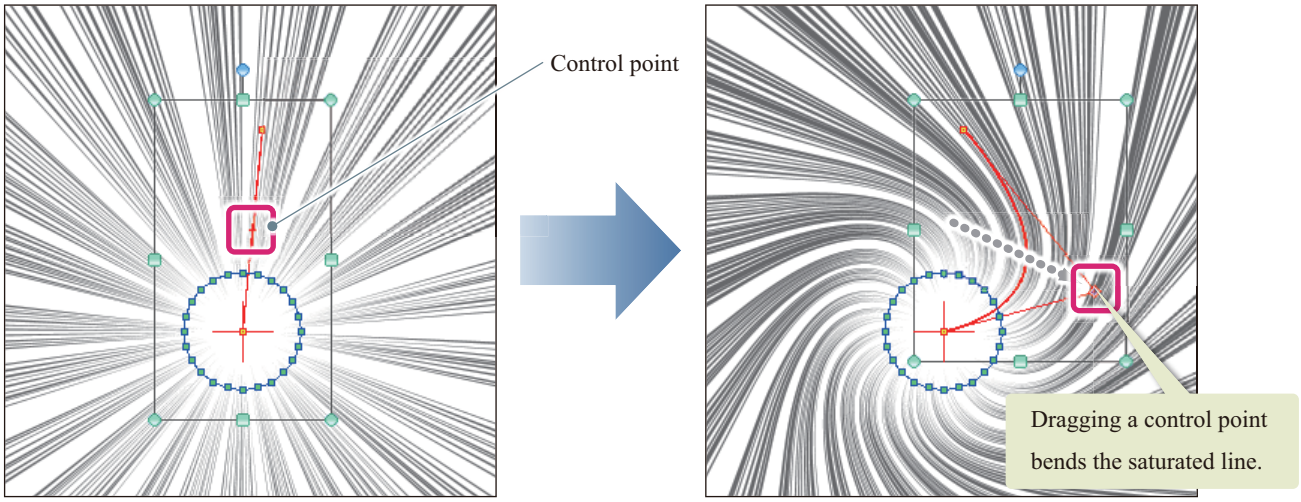
When turned on, applies tone to the saturated line. When tone is applied, the expression color of the layer becomes gray.

(3) Use eradiation line ruler for center

When snap to eradiation line ruler or eradiation curve ruler is turned on, you can draw the saturated line centered along the ruler.

(4) Make curve

When turned on, control points to adjust the curve are added to the shape line of the saturated line. You can then change the shape of the saturated line by editing the control points with the [Object] sub tool.



(5) Fill ground

Fills the area enclosed by the reference line.

Memo

- **Reference line is a line specified when drawing a saturated line, and serves as the reference position to draw the saturated line, for example. When specified to be circular, the circle becomes the reference line.**
- **Turning on [Make the reference position jags] fills the reference position with jagged paint line.**

(6) Opacity of painting

Configures the opacity of the fill color when [Fill ground] is turned on.

(7) Line color

Specify the color for the saturated line.

Main color	Configures the main drawing color as the saturated line color.
Sub color	Configures the sub drawing color as the saturated line color.
User color	Configures the color specified by the user as the saturated line color. Selecting a color with a color palette, eye dropper and the like, and clicking the icon allows you to configure the color. The configured color is not affected by changes in the main drawing color and sub drawing color, even when changed before the saturated line is drawn.
Select user color	Displays the dialog box for selecting a color. This item does not display as icon.

(8) Fill color

Specify the color for filling the ground.

Main color	Configures the main drawing color as ground color.
Sub color	Configures the sub drawing color as ground color.
User color	Configures the color specified by the user as ground color. Selecting a color with a color palette, eye dropper and the like, and clicking the icon allows you to configure the color. The configured color is not affected by changes in the main drawing color and sub drawing color, even when changed before the saturated line is drawn.
Select user color	Displays the dialog box for selecting a color. This item does not display as icon.

When the Object sub tool is selected

Allows you to configure the expression color for the saturated line and ground when a saturated line is selected with the [Object] sub tool.

(1) Main color

Configures the main drawing color for the saturated line. Clicking the color indicator displays the dialog box for selecting a color.

(2) Sub color

Specifies the sub drawing color for the saturated line. Clicking the color indicator displays the dialog box for selecting a color.

(3) Fill ground

Fills the area enclosed by the reference line.

Memo

- **Reference line is a line specified when drawing a saturated line, and serves as the reference point for drawing the saturated line, for example. When specified to be circular, the circle becomes the reference line.**
- **Turning on [Make the reference position jags] fills the reference position with jagged paint line.**

(4) Opacity of painting

Configures the opacity of the fill color when [Fill ground] is turned on.

Select

Allows you to configure the operating procedure for the layer and the like when the [Object] sub tool is used.

Important

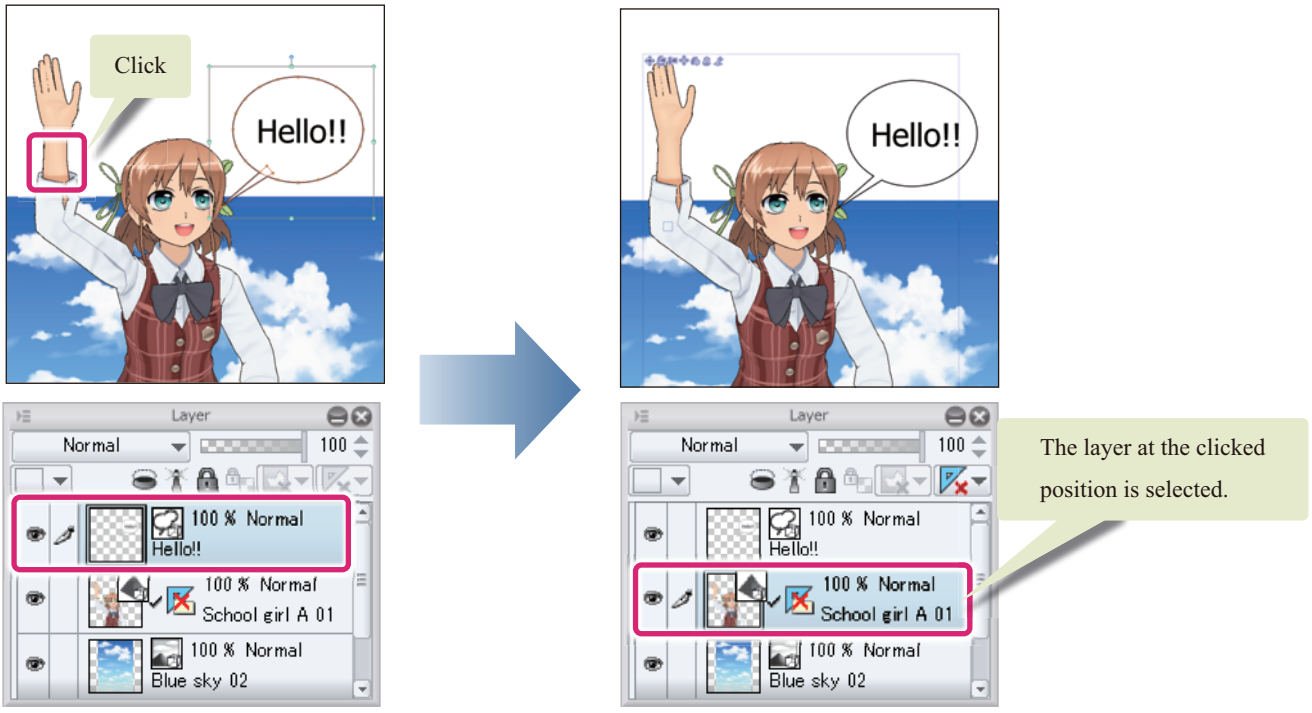
Some settings may not display depending on the selected layer or object.

(1) Operation of transparent parts

Configures the operation when a transparent area (area where nothing is drawn) is clicked or dragged.

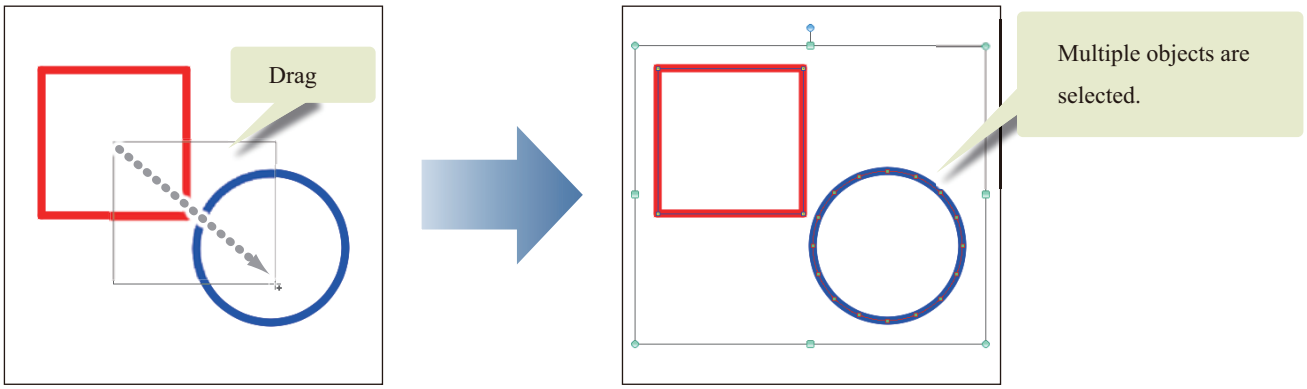
Select layer

Clicking a transparent area of the selected layer selects objects on other layers with drawings at the clicked point.



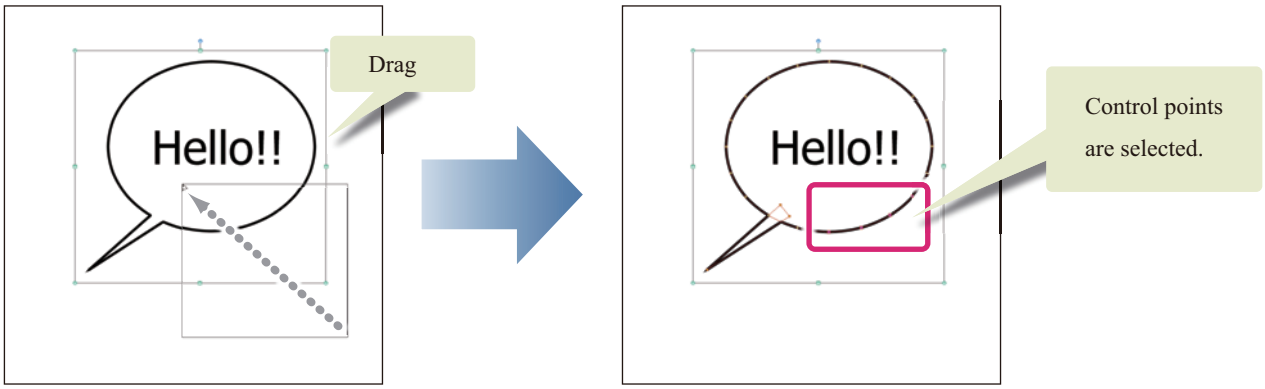
Select multiple by drag

Dragging a transparent area when a [Vector] layer, [Balloon] layer or the like is selected, selects all objects on the edited layer that are inside the dragged area. However, you will not be able to select objects if [Select control point by drag] is turned on.



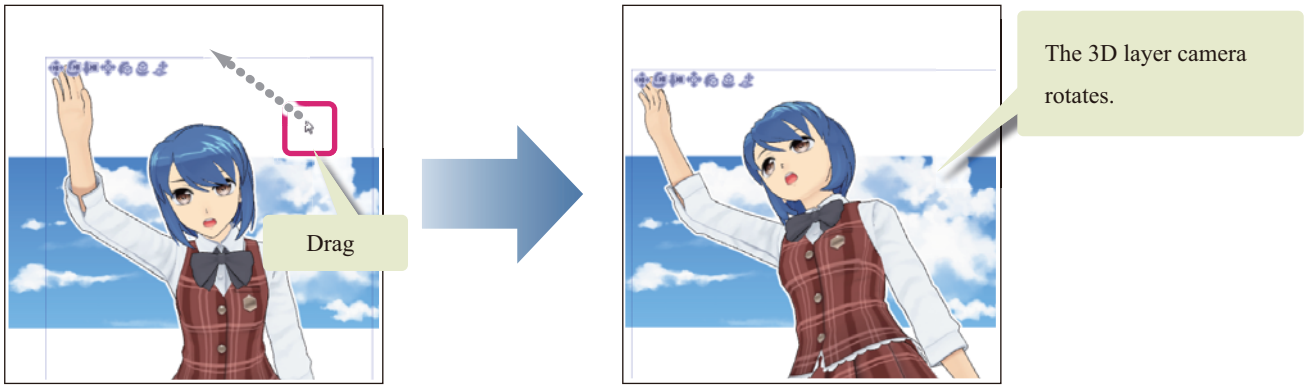
Select control point by drag

Dragging a transparent area when a [Vector] layer, [Balloon] layer or the like is selected, selects control points on the edited layer that are inside the dragged area. However, you will not be able to select control points if [Select multiple by drag] is turned on.



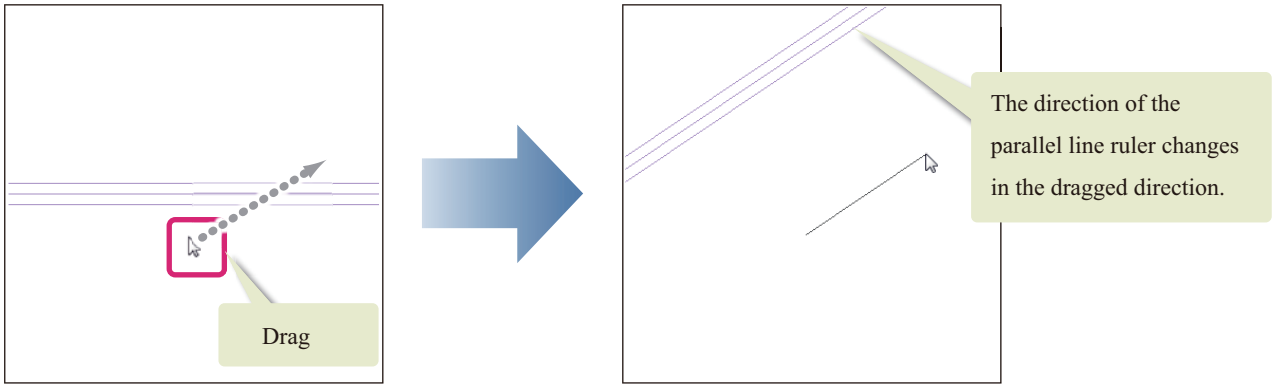
Rotate 3D camera

Dragging a transparent area when a 3D layer is selected rotates the 3D layer camera.



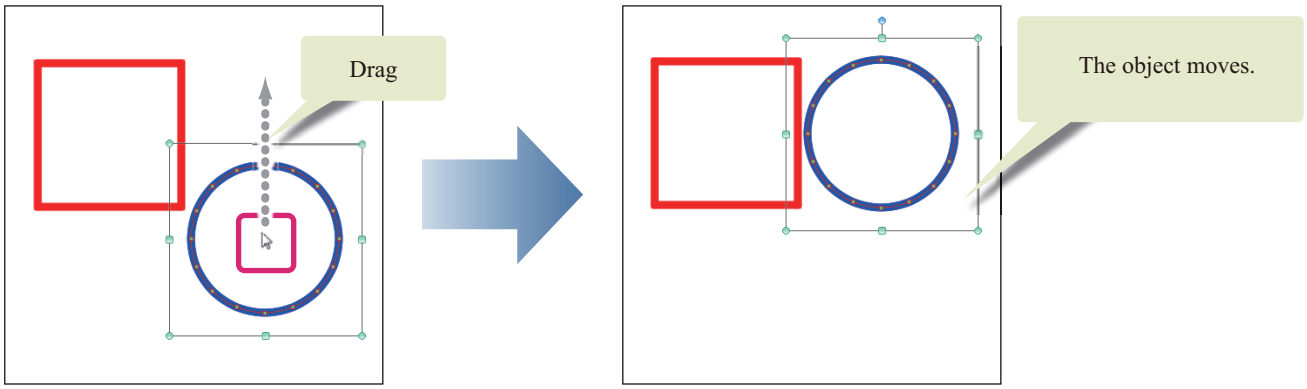
Set direction of parallel line ruler

Dragging when the parallel line ruler is displayed changes the direction of the parallel line ruler in the dragged direction.



Move even transparent if within border

Dragging a transparent area inside the handles when an object is selected moves the object.



(2) Selectable object

Configures the types of layers and objects that can be selected by clicking. The layers and objects that can be configured are as follows:

- Raster
- Vector
- Image material
- 3D
- Balloon
- Text
- Frame border
- Gradient
- Fill
- Ruler

(3) Add Selection

Configures the operation when another object or control point is selected when there are already selected objects or control points.

Select new	Cancels the current selection to select new objects or control points.
Select aditionally	Adds new objects or control points to the current selection.
Deselect partially	Removes newly selected objects or control points from the current selection.

(4) Change thickness while scaling

Allows you to change the thickness of the line in conjunction with the image size when a [Vector] layer or [Balloon] layer is scaled up/down using a handle.

(5) Select

Allows you to configure operations possible on [Vector] layer, [Balloon] layer, [Ruler] or the like.

Control point and scale/rotate	Handles, center of rotation and control points are displayed for the drawing on the selected layer. Dragging a handle allows you to scale up/down the entire drawing. Dragging the center of rotation allows you to rotate the entire drawing. Dragging a control point allows you to transform a line.
Scale up/Scale down/Rotate	Handles and center of rotation are displayed for the drawing on the selected layer. Dragging a handle allows you to scale up/down the entire drawing while keeping the angle of the guide. Dragging the center of rotation allows you to rotate the entire drawing.
Transform freely	Handles and center of rotation are displayed for the drawing on the selected layer. Dragging a handle allows you to change the angle of the guide and transform the entire drawing. Dragging the center of rotation allows you to rotate the entire drawing.
Move control point	Control points are displayed for the drawing on the selected layer. Dragging a control point allows you to transform a line.

(6) Snap to another frame border

Allows snapping to another side of the frame border or its extension when a control point or side of a frame border is moved. This setting displays when a frame border folder is selected.

(7) Work with another frame border

Allows you to simultaneously move a control point or side of an adjacent frame border when moving a control point or side of a frame border. This setting displays when a frame border folder is selected.

Select From

Allows you to configure layers to refer to when creating a selection area, or filling.

Some settings may not display depending on the selected tool or sub tool.

(1) Multiple Referring

When turned on, allows you to configure the layer(s) to refer to. If turned off, only the selected layer is referred to.

All layers	Refers to all layers. However, hidden layers cannot be referred to.
Referring layer	Refers to layers configured as reference layer.
Selected layer	Refers to layers that are selected on the [Layer] palette.
Layer in folder	Refers to layers within the layer folder. Layers not included in the same folder as the edited layer cannot be referred to.

(2) Non-reference layer

Toggles non-reference to a layer between on and off. This setting becomes available when [Multiple referring] is turned on.

(1) Not refer to draft	Excludes the [Draft] layer from the targets of reference.
(2) Not refer to text	Excludes the [Text] layer from the targets of reference.
(3) Not refer to edit layer	Excludes layers for drawing from the targets of reference.
(4) Not refer to paper	Excludes the [Paper] layer from the targets of reference.
(5) Not refer to locked layers	Excludes locked layer(s) from the targets of reference.

(3) Refer image frame

When turned on, includes the outer perimeter of the canvas in the border.

(4) Stop filling at center line of vector

Selects or fills the area up to the center line of vectors. This is valid only when [Vector] layers are referred to.

Select layer

Allows you to configure layers not to be selected when using the [Select layer] tool.

(1) Not select text

Excludes the [Text] layer from the targets of [Select layer].

(2) Not select draft

Excludes the [Draft] layer from the targets of [Select layer].

(3) Not select locked layers

Excludes locked layers from the targeta of [Select layer].

(4) Do not select fill in mono *

Excludes the [Fill in monochrome] and [Paper] layers from the targets of [Select layer].

Shape operation

Allows you to configure the starting point, rotation after fixed and the like when creating a selection using a figure, or drawing a figure.

(1) Start from center

Draws from the center as the starting point.

(2) Adjust angle after fixed

When turned on, allows you to change the angle of the figure by moving the mouse after finishing drawing by dragging. Clicking fixes the angle of the figure and completes the drawing.

(3) Step of angle

Turning on this item when [Rotate after fixed] is selected allows you to configure the minimum step by which the figure will rotate each time.

Specify ruler

Allows you to configure the position and angle of the ruler in addition to snap to the ruler when a special ruler or symmetrical ruler is selected with the [Object] sub tool.

(1) Snap

When turned on, drawing snaps to a ruler.

(2) Center X

Allows you to configure the offset of the center of the special ruler from the canvas left edge. This setting is available when the ruler is [Eradiation line ruler], [Eradiation curve ruler], [Concentric circle ruler] or [Guide (Vertical)].

(3) Center Y

Allows you to configure the offset of the center of the special ruler from the canvas top edge. This setting is available when the ruler is [Eradiation line ruler], [Eradiation curve ruler], [Concentric circle ruler] or [Guide (Horizontal)].

(4) Angle

When [Parallel line ruler], [Concentric circle ruler], or [Symmetrical ruler] is selected, you can set the angle of the ruler.

When [Multi-curve ruler] is selected, you can set the direction of drawing lines with the same shape as the ruler.

Spraying effect

For [Spraying effect] category, see "Brush shape → Spraying effect" .

Starting and Ending

Allows you to configure starting and ending effect when using a drawing-type tool. Starting and ending is an effect that gradually changes the strength of the stroke at the start and end of a line.

Important **Some settings may not display depending on the selected tool or sub tool.**

(1) Starting and Ending

When clicked, the [Settings of effect source of starting and ending] pop-up dialog box displays.

Configure the starting and ending settings by selecting the check box of each relevant item. You can also configure the ratio of the minimum strength value to start and/or end a line using the slider next to each item.

Memo

- **You can configure multiple starting and ending items.**
- **Displayed starting and ending items vary depending on the selected tool or sub tool.**

(2) How to specify

Select the method for specifying the starting and ending length.

By length	Specifies the starting and ending length numerically. Drawing starts at the ratio configured in [Minimum value] for [Starting and ending]. The strength of the stroke increases gradually along the length specified in [Starting] until it reaches the maximum value (100%). Drawing ends by gradually decreasing the strength of the stroke along the length specified in [Ending] until it reaches the minimum value at the end.
By percentage	Specifies the starting and ending length as a percentage of the length of the line to draw. Drawing starts at the [Mininum value] for [Starting and ending]. The strength of the stroke increases gradually along the length specified in [Starting] until it reaches the maximum value (100%). Drawing ends by gradually decreasing the strength of the stroke along the length specified in [Ending] until it reaches the minimum value at the end.
Fade	Applies only the ending effect to a line. Ending starts at the maximum value (100%). The strength of the stroke gradually decreases along the length specified in [Ending] until it reaches the minimum value configured in [Starting and Ending]. Once the minimum value is reached, the value is maintained until the end.

(3) Starting

When turned on, applies the starting effect to a line. A slider allows you to configure the starting length.

(4) Ending

When turned on, applies the ending effect to a line. A slider allows you to configure the ending length.

(5) Starting and ending by speed

Adjusts the strength of [Starting and Ending] by the speed of the stroke.

Stream line *

Displayed items vary depending on the selected tool or sub tool.

→ "When the Stream line sub tool is selected"

→ "When the Object sub tool is selected"

When the Stream line sub tool is selected

Allows you to configure the destination layer for the stream line, angle and the like.

(1) Destination layer

Allows you to select the destination layer for the stream line.

Draw on editing layer	Draws the stream line on the selected layer.
Always create stream line layer	Creates a new [Stream line] layer to draw the stream line. When drawn on a [Stream line] layer, the settings of a stream line can be changed even after drawn.
Draw on stream line layer	When a [Stream line] layer is selected, allows you to redraw the reference line while keeping the settings of the already drawn stream line. You can change the position of the reference line of the stream line, or add a reference line to only a portion of the stream line. When other than a stream line layer is selected, creates a new stream line layer to draw the stream line.

(2) Toning

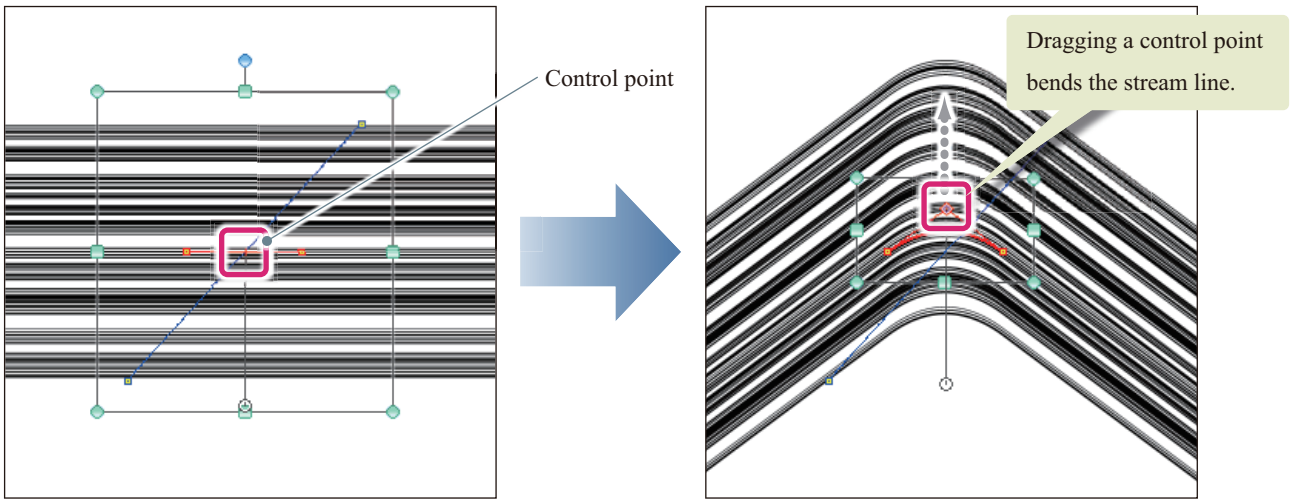
When turned on, applies tone to the stream line. When tone is applied, the expression color of the layer becomes gray.

(3) Use parallel line ruler for angle

When snap to parallel line ruler or multi-curve ruler is turned on, draws the stream line at an angle matching that of the ruler.

(4) Make curve

When turned on, control points to adjust the curve are added to the shape line of the stream line. You can then change the shape of the stream line by editing the control points with the [Object] sub tool.



(5) Angle

Specifies the angle of the stream line.

Memo **If [Use parallel line ruler for angle] is turned on, the ruler angle takes precedence.**

When the Object sub tool is selected

Allows you to configure the expression color for the stream line and ground when a stream line is selected with the [Object] sub tool.

(1) Main color

Configures the color of the stream line. Clicking the color indicator displays the dialog box for selecting a color.

(2) Sub color

Specifies the sub drawing color for the stream line. Clicking the color indicator displays the dialog box for selecting a color.

(3) Angle

Specifies the angle of the stream line.

Stroke

For [Stroke] category, see "Brush shape → Stroke" .

T

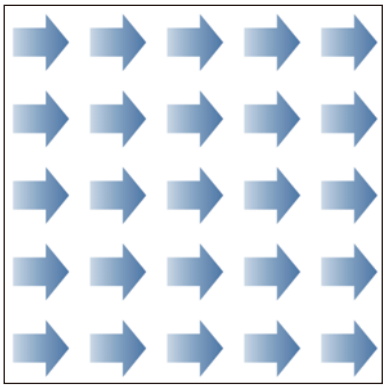
Tiling

Allows you to configure the tiling of an image when the [Image material] layer is selected.

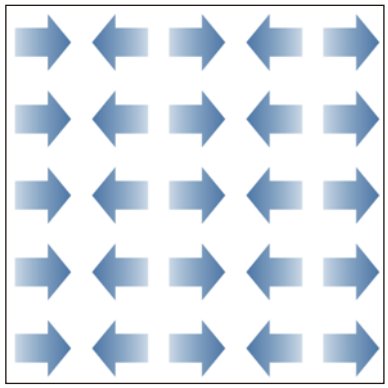
(1) Tiling

Specify the repeat method of tiling with the pull down menu.

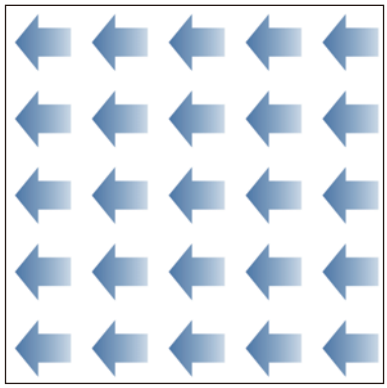
Memo **Tiling cannot be configured if the selected layer is a [Vector image material] layer.**



Repeat



Wrap

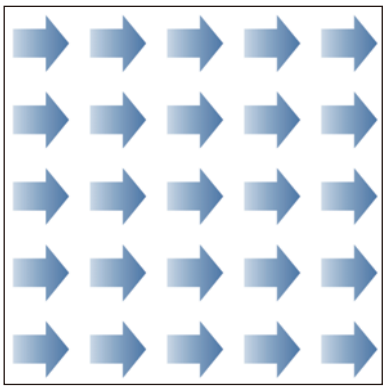


Flip

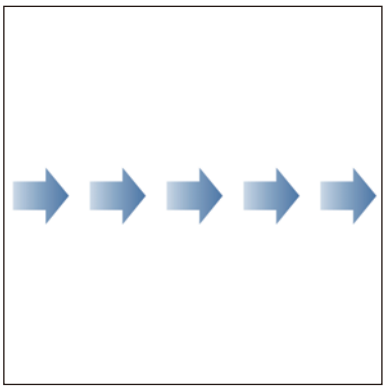
Repeat	Tiles the imported image without changing its direction.
Wrap	Tiles the imported image by alternating its direction.
Flip	Tiles the imported image after flipping. When [Tiling direction] is [Only vertical], the image is tiled after being flipped vertically.

(2) Tiling direction

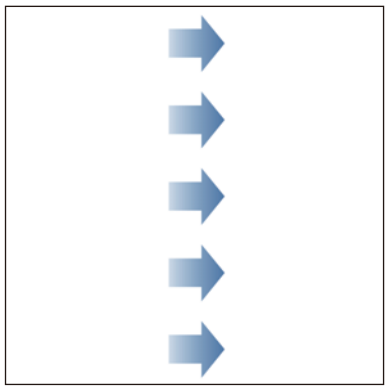
Specify the orientation of tiling of an image.



Vertical and horizontal



Only horizontal



Only vertical

Vertical and horizontal	The image is arranged vertically and horizontally.
Only horizontal	The image is arranged only in the horizontal direction.
Only vertical	The image is arranged only in the vertical direction.

Text

Allows you to configure alignment, spacing and the like when using the [Text] sub tool, or when the [Text] layer is selected with the [Object] sub tool.

Important **Some settings may not display depending on the selected tool or sub tool.**

(1) Justify

Configure the position for aligning the text lines.

Top align/Left align	Top align applies to vertical text while left align applies to horizontal text.
Center align	Centers each line.
Bottom align/Right align	Bottom align applies to vertical text while right align applies to horizontal text.

(2) Line space

Adjusts the space between lines.

Memo **Turning on [Use drawing compatible with IllustSudio/Manga Studio 4.0] under [File] → [Text] in the [Preferences] dialog box that displays when [File] menu ([Manga Studio 5.0] menu in Mac OS X version) → [Preferences] is selected, allows you to configure the line space for each line when using the [Text] sub tool.**

(3) How to specify

Configures the method for specifying the line space.

Specify length	Specify the space between lines as length (in points or Q).
By percentage	Specify the space between lines as a ratio (%) of the letter size.

Memo

- **To configure [Method to specify], turn on [Use drawing compatible with IllustSudio/Manga Studio 4.0] under [File] → [Text] in the [Preferences] dialog box that displays when [File] menu ([Manga Studio 5.0] menu in Mac OS X version) → [Preferences] is selected.**
- **The unit of [Specify length] for [Line space] can be toggled between points (pt) and Q. It is configured in [Ruler/Frame/Unit] → [Unit] on the [Preferences] dialog box that displays when [File] menu ([Manga Studio 5.0] menu in Mac OS X version) → [Preferences] is selected.**

(4) Text color

Allows you to specify the color for the additional text.

Main color	Configures the main drawing color as text color.
Sub color	Configures the sub drawing color as text color.
User color	Configures the color specified by the user as text color. Selecting a color with a color palette, eye dropper and the like, and clicking the icon allows you to configure the color. The configured color is not affected by changes in the main drawing color and sub drawing color, even when changed before the text is input.
Select user color	Displays the dialog box for selecting a text color. This item does not display as icon.

Texture

For [Texture] category, see "Brush shape → Texture" .

Transform settings

Allows you to configure how to transform image materials and drawings. These settings are available in the following cases:

- When an [Image material] layer is selected with the [Object] sub tool
- When an item is selected from [Edit] menu → [Transform]

Important **Some settings may not display depending on the selected tool or sub tool.**

(1) Reset transformation

Restores the image material being edited to the state before transform.

(2) Flip horizontal

Horizontally reverses the image material being edited.

(3) Flip vertical

Vertically reverses the image material being edited.

(4) How to transform

Configures how to transform the image. You can select from [Scale up/Scale down/Rotate] and [Free Transform].

(5) Center of rotation

Configures the center of rotation for the image.

You can select from [Center], [Top left], [Top right], [Bottom right], [Bottom left], [Top], [Left], [Right], [Bottom] and [Free position].

(6) OK

Commits the image transform.

(7) Cancel

Cancels the image transform.

(8) Change vector width

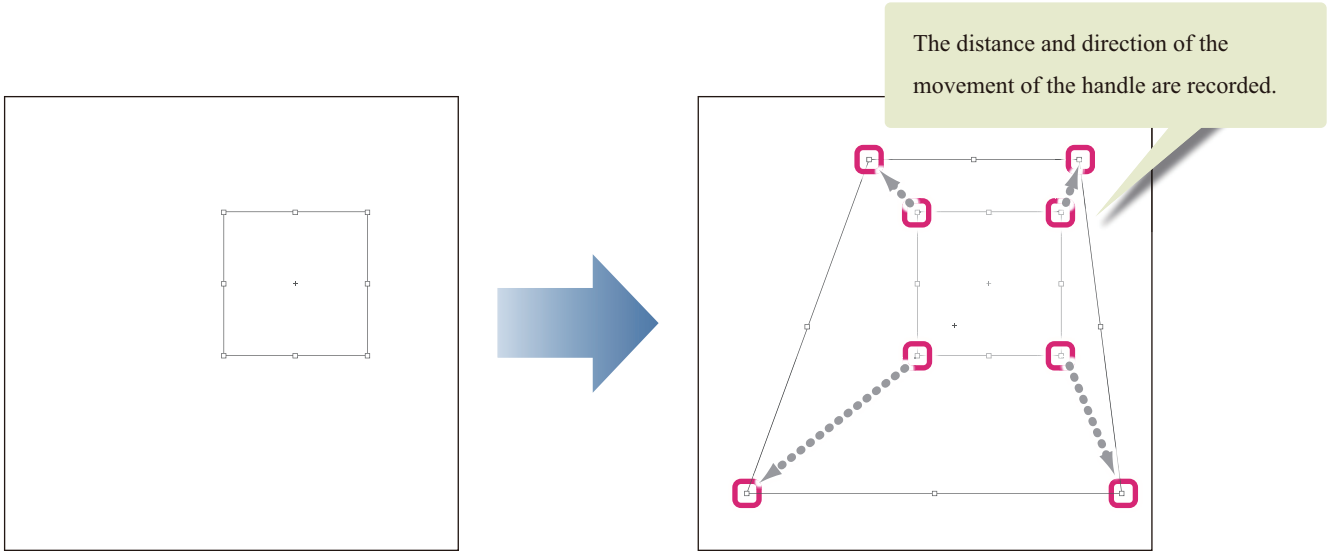
When turned on, transforming a drawing on a vector layer changes the width of lines in conjunction with transform. When turned off, the original line widths are kept during transform.

(9) Auto action settings

Allows you to configure how transform is recorded in the auto action.

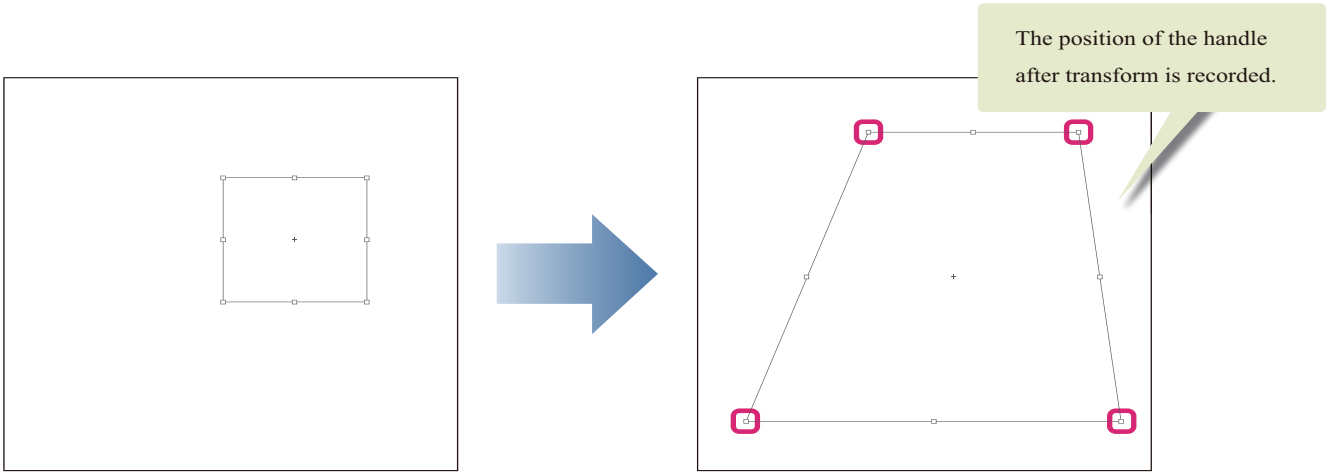
Record the scroll amount

Records the travel distance/orientation of a handle due to transform. When the auto action is run, all selected handles move the same distance in the same direction.



Record coordinates after transformation

Records the coordinate value of a transformed handle to an auto action. When the auto action is run, all selected handles move to the position (coordinate) recorded by the auto action.



Memo

This item can be configured when the transform is recorded in an auto action.

V

Vector

Allows you to configure the display color when a line drawn on a [Vector] layer is selected with the [Object] sub tool.

(1) Main color

This setting is available when a line drawn on a [Vector] layer is selected with the [Object] sub tool. Clicking the color indicator displays the dialog box for selecting a color. Configuring a color changes the display color to the configured color.

Memo

For [Vector] layers whose expression color is [Gray], only the brightness is reflected in the original drawing color.

(2) Sub color

This setting is available when a line drawn on a [Vector] layer is selected with the [Object] sub tool. Clicking the color indicator displays the dialog box for selecting a color. Configuring a color changes the layer sub color to the configured color.

Memo

[Sub color] is available when sub color is used in [Mixing rate of sub drawing color] and the like. The following methods are available for using sub color:

- **Select a line drawn on the vector layer with the [Object] tool and configure sub color in [Mixing rate of sub drawing color] under the [Ink] category.**
- **Configure [Mixing rate of sub drawing color] for a drawing-type tool and draw on the vector layer.**
- **Configure a gray (black and white) pattern as shape to the brush tip of a drawing-type tool and draw on the vector layer.**

Z

Zoom

Allows you to configure how to operate when using the [Zoom] tool.

(1) Click

Configure the operation to perform when the canvas is clicked.

Scale up	Clicking on the canvas scales up the view.
Scale down	Clicking on the canvas scales down the view.

(2) Drag

Configure the operation to perform when the canvas is dragged.

Scale down by left, Scale up by right	Dragging to the left scales down the view, while dragging to the right scales up the view.
Specify by rectangle	Drag the mouse to specify an area by a rectangle. The image in the specified area is displayed fitted to the screen.
None	Disables scale up/down by drag.

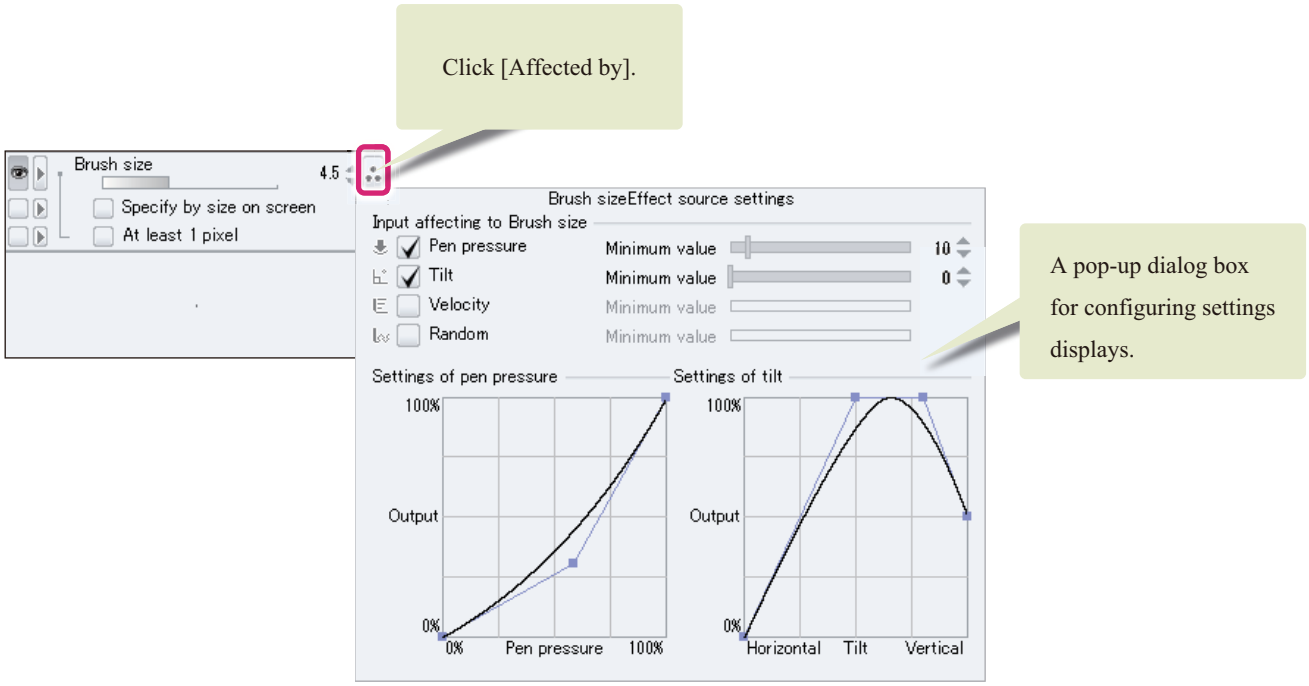
Effect Source

This chapter introduces available [Affected by] options for each [Sub tool detail] palette settings.

Effect Source

Some settings on the [Tool property] palette or [Sub tool detail] palette have a button displayed on their right. This button is called [Affected by].

It allows you to configure tablet functions and the like that affect the relevant item. Clicking the button displays a screen where you can change the settings. When configured, the [Affected by] button changes to the icon of the configured item.

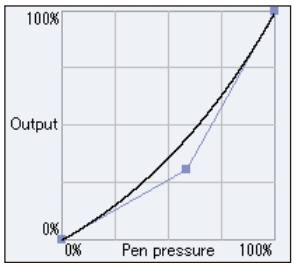
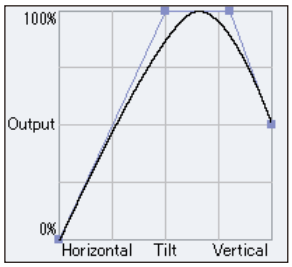


Effect source settings

Clicking the [Affected by] button on the [Tool property] palette or [Sub tool detail] palette allows you to configure the following options that affect each setting. Turn on the option to configure and specify the [Minimum value] with the sliders.

You can specify multiple options. When multiple options are specified, the [Affect by] button changes to .

Important **Items that can be configured as effect sources vary depending on the created tool.**

Pen pressure		Changes the tool setting by detecting the pen pressure. You can adjust the pen pressure detect level for the tool using the [Pen pressure settings graph] shown below. Clicking on the graph allows you to add a point (up to 16) and adjust the pen pressure curve by dragging the points. Dragging a point out of the graph allows you to delete the point. 
Tilt		Changes the tool setting by detecting the pen tilt. You can adjust the pen tilt detect level for the tool using the [Tilt settings graph] shown below. Clicking on the graph allows you to add a point (up to 16) and adjust the tilt curve by dragging the points. Dragging a point out of the graph allows you to delete the point. 
Velocity		Changes the tool setting by detecting the speed of the pen stroke.
Random		Changes the tool settings randomly.

Effect source settings (Direction)

Clicking the [Affected by] button for [Direction] on the [Tool property] palette or [Sub tool detail] palette allows you to configure the following options that affect the direction of the brush tip. Turn on the option to configure.

You can configure [Random] and other options simultaneously. When multiple options are specified, the [Affect by] button changes to .

Important **Items that can be configured as effect sources vary depending on the created tool.**

None		Keeps the direction constant.
Pen orientation		Makes the brush tip tilt in the direction the tablet pen is tilted. The effect is reflected when the used tablet is capable of detecting the pen orientation.
Rotation of pen axis		Changes the brush tip rotation angle in accordance with the rotation (twist) of the tablet pen. The effect is reflected when the used tablet is capable of detecting the pen axis rotation.
Line orientation		Makes the brush tip point in the direction of a drawn line.
Random		Changes the rotation angle randomly. Configure the degree of the effect with the slider.

Effect source settings (Direction of particle)

Clicking the [Affected by] button for [Direction of particle] on the [Tool property] palette or [Sub tool detail] palette allows you to configure the following options that affect the direction of the particles. Turn on the option to configure.

You can configure [Random] and other options simultaneously. When multiple options are specified, the [Affect by] button changes to .

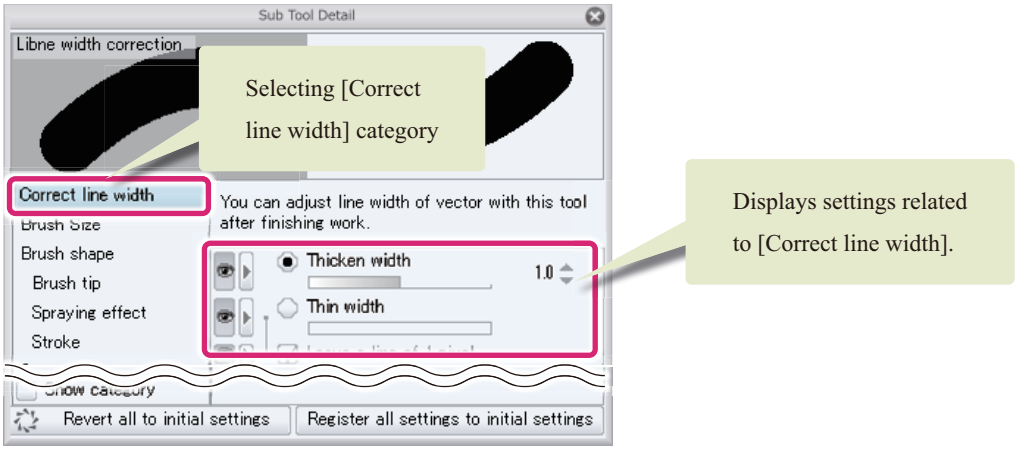
None		Keeps the direction of the particles constant.
Line orientation		Changes the direction of the particles in the direction of the line.
Orientation for whole spraying		Changes the direction of the particles in accordance with the rotation angle configured for [Direction] of the [Brush tip] category.
Spray to center		Changes the direction of the particles to make them point the center of the brush tip.
Random		The orientation of the particles changes randomly. Configure the degree of the effect with the slider.

Tools and Sub Tool Categories

This chapter introduces categories that can be configured by tool and sub tool.

Categories

Categories are items displayed on the left side of the [Sub Tool Detail] palette. Selecting a category changes the setting screen of the sub tool, displaying settings related to the selected category.



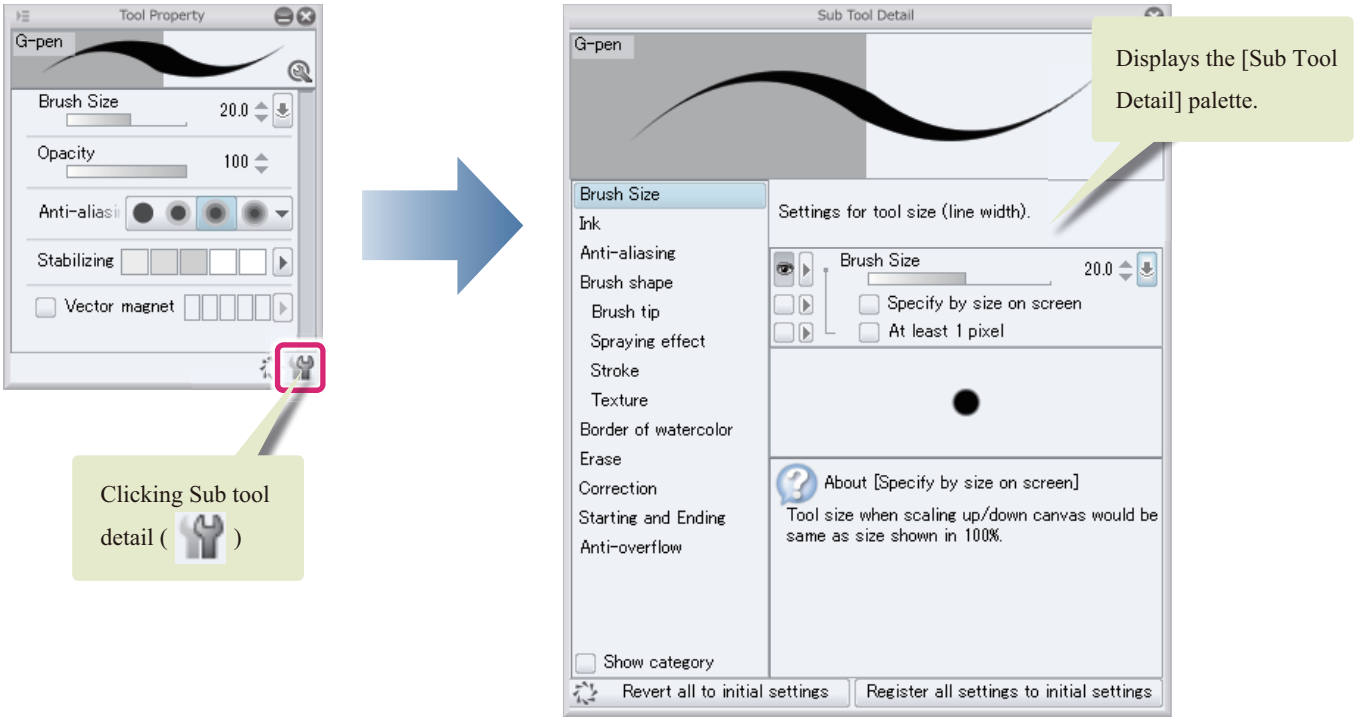
Checking the Categories

The categories available in a tool or sub tool can be checked in the [Sub Tool Detail] palette. Furthermore, categories can be displayed on the [Tool Property] palette by configuring the [Sub Tool Detail] palette.

This section describes how to display the [Sub Tool Detail] palette and how to display categories on the [Tool Property] palette.

Displaying the Sub tool detail palette

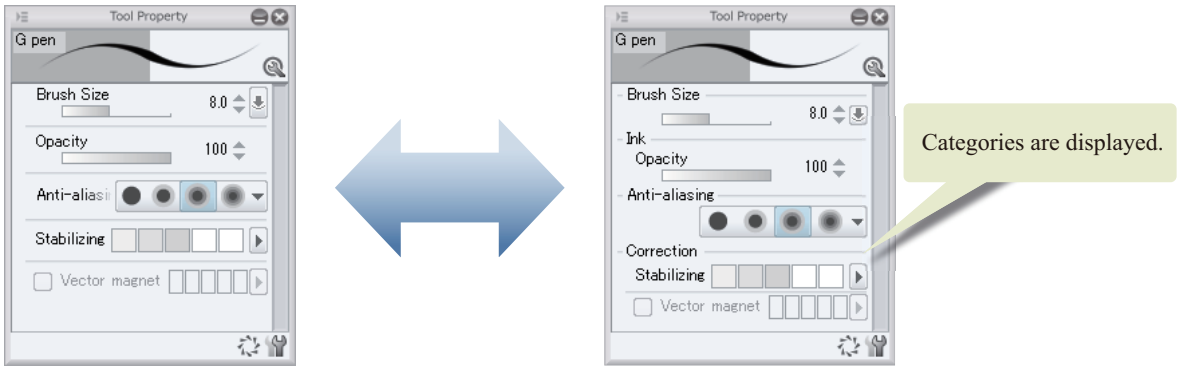
Click [Sub Tool Detail] on the [Tool Property] palette.



Memo **The [Sub Tool Detail] palette can also be displayed by selecting [Window] menu → [Sub Tool Detail].**

Displaying Categories on the Tool property Palette

To display categories on the [Tool Property] palette, select [Palette menu] → [Show category] on the [Tool Property] palette.



Show category:OFF　　Show category:ON

Memo **turning on [Show category] on the [Sub Tool Detail] palette also displays the categories on the [Tool Property] palette.**

Output Process and Input Process

With Manga Studio 5.0 sub tools, the operation and items that can be configured change depending on the combination of [Output process] and [Input process]. This section describes what sub tool input process and output process are.

Output process	Indicates the target to be created or processed.
Input process	Configures the input method.

Here, [Lasso] and [Selection pen] are used as examples.

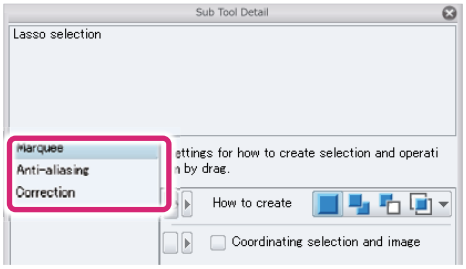
Lasso

[Output process] and [Input process] of [Lasso] are as follows.

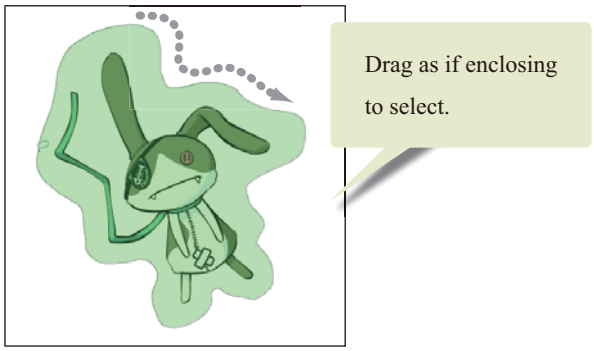
Tool name	Output process	Input process
Lasso	Selection	Lasso

Since the [Output process] is [Selection] and [Input process] is [Lasso], the selection is created as if enclosing by dragging.

Categories that can be configured on the [Sub Tool Detail] palette are as indicated in the figure below.



[Sub tool detail] palette of [Lasso selection]



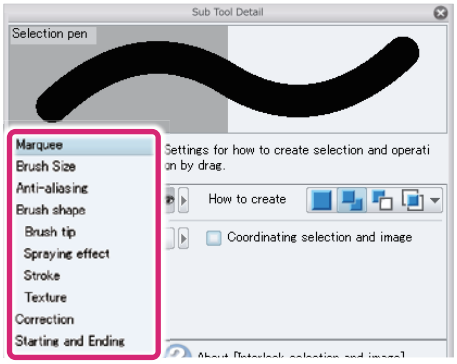
Selection pen

[Output process] and [Input process] of [Selection pen] are as follows.

Tool name	Output process	Input process
Selection pen	Selection	Brush

Since the [Output process] is [Selection] and [Input process] is [Brush], the selection is created in the area drawn by dragging.

Categories that can be configured on the [Sub Tool Detail] palette are as indicated in the figure below. Since the selection is created by drawing as with a brush, settings such as [Brush size] and [Brush shape] are added.

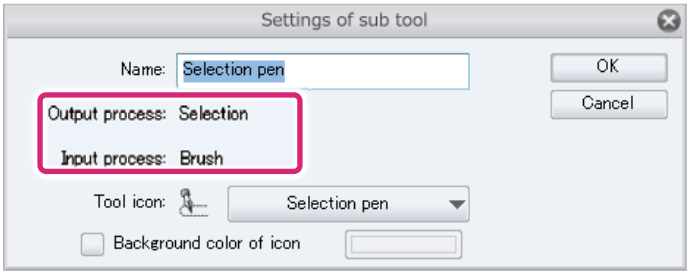


[Sub tool detail] palette of [Selection pen]

Checking the Output Process and Input Process

To check the [Output process] and [Input process] of a sub tool, click the [Palette menu] button on the upper left corner of the [Sub tool] palette. Select [Sub tool settings] on the menu that displays.

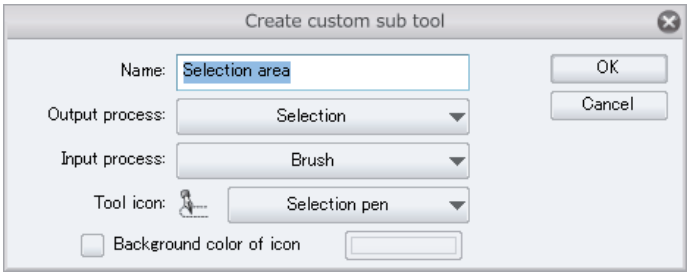
The [Sub tool settings] dialog box displays. There, you can check the [Output process] and [Input process] of the currently selected sub tool.



Configuring the Output Process and Input Process

To configure [Output process] and [Input process] to a sub tool, a new sub tool is necessary. Select [Create custom sub tool] on the menu that displays when you click [Palette menu] on the upper left corner of the [Sub tool] palette.

Select [Output process], [Input process] and the like on the [Create custom sub tool] dialog box that displays.



Input and Output Processes and Categories List (By Tool and Sub Tool)

This sections lists the input and output processes, and categories by tool and sub tool. It allows you to check the available categories for each tool and sub tool.

Zoom

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
zoom	zoom	Zoom

Hand

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Hand	Hand	–

Rotate

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Rotate	Rotate	Rotate

Object (Image material Layer)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Object	Object	● Select ● Transform settings ● Image material ● Tiling

Object (Quick mask)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Object	Object	Select

Object (Gradient Layer)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Object	Object	● Select ● Fill ● Ink ● Anti-aliasing

Object (Frame border folder)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Object	Object	● Select ● Frame Border ● Brush size ● Anti-aliasing ● Brush shape ● Brush shape → Texture ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Brush tip

Object (Ruler)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Object	Object	● Select ● Ruler

Object (Saturated line Layer) *

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Object	Object	● Select ● Saturated line * ● Drawing interval * ● Drawing position * ● Brush size ● Anti-aliasing ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Texture ● Starting and Ending

Object (Selection Layer)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Object	Object	Select

Object (Text)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Object	Object	● Select ● Font ● Text ● Reading ● Edit settings

Object (Special Ruler)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Object	Object	● Select ● Specify ruler

Object (Perspective ruler)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Object	Object	● Select ● Perspective ruler

Object (Balloon)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Object	Object	● Select ● Balloon ● Brush size ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Texture

Object (Vector Layer)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Object	Object	● Select ● Vector ● Brush size ● Ink ● Anti-aliasing ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Texture ● Starting and Ending

Object (Fill in monochrome Layer)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Object	Object	● Select ● Fill ● Ink

Object (Raster Layer)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Object	Object	Select

Object (Stream line Layer) *

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Object	Object	● Select ● Stream line * ● Drawing interval * ● Drawing position * ● Brush size ● Anti-aliasing ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Texture ● Starting and Ending

Object (3D item Material)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Object	Object	● Select ● Camera ● Light Source ● Preference ● Allocate ● Outline

Object (3D character Material)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Object	Object	● Select ● Camera ● Light Source ● Character ● Pose ● Manga perspective ● Allocate ● Outline ● Preference

Object (3D pose model Material)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Object	Object	● Select ● Camera ● Light Source ● Pose ● Allocate ● Outline ● Preference

Select layer

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Select layer	Simple rectangle	Select layer

Move layer

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Move	Move	Move

Marquee (Rectangle/Ellipse)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Selection	Figure	● Anti-aliasing ● Figure ● Shape operation ● Marquee ● Correction

Marquee (Lasso)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Selection	Lasso	● Marquee ● Anti-aliasing ● Correction

Marquee (Polyline)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Selection	Continuous curve	● Marquee ● Continuous curve ● Anti-aliasing ● Correction

Marquee (Selection pen/ Selection erase)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Selection	Brush	● Marquee ● Brush size ● Anti-aliasing ● Brush shape ● Brush shape → Texture ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Brush tip ● Correction ● Starting and Ending

Marquee (Shrink selection)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Closed selection	Lasso	● Marquee ● Closed area fill ● Select From ● Anti-aliasing ● Correction

Auto select

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Selection	Fill	● Marquee ● Fill ● Select From ● Anti-aliasing

Eye dropper

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Eye dropper	Eye dropper	Eye dropper

Pen (Pen)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Draw directly	Pen	● Brush size ● Ink ● Anti-aliasing ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Texture ● Border of watercolor ● Erase ● Correction ● Starting and Ending ● Anti-overflow

Pen (Markers other than the Dot pen)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Draw directly	Pen	● Brush size ● Ink ● Anti-aliasing ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Texture ● Border of watercolor ● Erase ● Correction ● Starting and Ending ● Anti-overflow

Pen (Dot pen)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Draw directly	Dot pen	● Dot pen ● Ink ● Correction

Pencil (Pencil)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Draw directly	Pen	● Brush size ● Ink ● Anti-aliasing ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Texture ● Border of watercolor ● Erase ● Correction ● Starting and Ending ● Anti-overflow

Pencil (Pastel)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Draw directly	Brush	● Brush size ● Ink ● Anti-aliasing ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Texture ● Border of watercolor ● Erase ● Correction ● Starting and Ending ● Anti-overflow

Drawing-type tool (Brush, Airbrush, Decoration)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Draw directly	Brush	● Brush size ● Ink ● Anti-aliasing ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Texture ● Border of watercolor ● Erase ● Correction ● Starting and Ending ● Anti-overflow

Eraser

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Draw directly	Eraser	● Brush size ● Ink ● Anti-aliasing ● Brush shape ● Brush shape → Texture ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Brush tip ● Border of watercolor ● Erase ● Correction ● Starting and Ending ● Anti-overflow

Blend (Except Copy stamp)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Draw directly	Brush	● Brush size ● Ink ● Anti-aliasing ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Texture ● Border of watercolor ● Erase ● Correction ● Starting and Ending ● Anti-overflow

Blend (Copy stamp)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Copy stamp	Copy stamp	● Copy stamp ● Brush size ● Ink ● Anti-aliasing ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Texture ● Correction ● Starting and Ending ● Anti-overflow

Fill (Refer edited layer only /Refer other layers)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Draw directly	Fill	● Fill ● Ink ● Select From ● Anti-aliasing

Fill (Close and fill)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Closed area fill	Lasso	● Closed area fill ● Select From ● Ink ● Anti-aliasing ● Correction

Fill (Paint unfilled area)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Closed area fill	Brush	● Closed area fill ● Select From ● Brush size ● Ink ● Anti-aliasing ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Correction ● Starting and Ending

Gradient

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Gradient	Gradient	● Gradient ● Ink ● Anti-aliasing

Figure (Straight line/Curve)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Draw directly	Unit curve	● Curve by step ● Brush size ● Ink ● Anti-aliasing ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Texture ● Correction ● Starting and Ending

Figure (Polyline/Continuous curve)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Draw directly	Continuous curve	● Continuous curve ● Brush size ● Ink ● Anti-aliasing ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Texture ● Correction ● Starting and Ending

Figure (Lasso fill)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Draw directly	Lasso	● Ink ● Anti-aliasing ● Correction

Figure (Rectangle/Ellipse/Polygon)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Draw directly	Figure	● Figure ● Shape operation ● Brush size ● Ink ● Anti-aliasing ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Texture ● Correction

Figure (Rectangle frame)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Create frame	Figure	● Create frame ● Figure ● Shape operation ● Brush size ● Anti-aliasing ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Texture ● Correction

Figure (Polyline frame)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Create frame	Continuous curve	● Create frame ● Continuous curve ● Brush size ● Anti-aliasing ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Texture ● Correction

Figure (Frame border pen)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Create frame	Brush	● Create frame ● Brush size ● Anti-aliasing ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Texture ● Correction ● Starting and Ending

Figure (Divide frame folder/Divide frame border)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Cut border	Cut border	Cut frame border *

Figure (Linear ruler)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Create ruler	Unit curve	● Create ruler ● Curve by step ● Correction

Figure (Curve ruler)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Create ruler	Continuous curve	● Create ruler ● Continuous curve ● Correction

Figure (Figure ruler)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Create ruler	Figure	● Create ruler ● Figure ● Shape operation ● Correction

Figure (Ruler pen)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Create ruler	Brush	● Create ruler ● Correction

Ruler (Special ruler/Guide)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Create special ruler	Create special ruler	Create special ruler

Figure (Perspective ruler)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Perspective ruler	Perspective ruler	Perspective ruler

Figure (Symmetrical ruler)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Create a symmetrical ruler	Create a symmetrical ruler	Create symmetrical ruler

Figure (Stream line) *

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Stream line	Continuous curve	● Stream line * ● Continuous curve ● Brush size ● Drawing interval * ● Drawing position * ● Ink ● Anti-aliasing ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Texture ● Correction ● Starting and Ending

Figure (Scattered saturated line, Dense saturated line, Brightness, Burst) *

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Saturated line	Figure	● Saturated line * ● Figure ● Shape operation ● Brush size ● Drawing interval * ● Drawing position * ● Ink ● Anti-aliasing ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Texture ● Correction ● Starting and Ending

Figure (Dark saturated line (curve)) *

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Saturated line	Continuous curve	● Saturated line * ● Continuous curve ● Brush size ● Drawing interval * ● Drawing position * ● Ink ● Anti-aliasing ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Texture ● Correction ● Starting and Ending

Text (Text)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Create text	Create text	● Text ● Font ● Reading ● Edit settings

Text (Ellipse balloon)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Create balloon	Figure	● Create Balloon ● Figure ● Shape operation ● Brush size ● Anti-aliasing ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Texture ● Correction

Text (Curve balloon)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Create balloon	Continuous curves	● Create Balloon ● Continuous curve ● Brush size ● Anti-aliasing ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Texture ● Correction

Text (Balloon pen)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Create balloon	Brush	● Create Balloon ● Brush size ● Anti-aliasing ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Texture ● Correction ● Starting and Ending

Text (Balloon tail/Thought balloon tail)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Balloon tail	Balloon tail	● Balloon tail ● Correction

Text (Flash) *

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Saturated line	Figure	● Saturated line * ● Figure ● Shape operation ● Brush size ● Drawing interval * ● Drawing position * ● Ink ● Anti-aliasing ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Brush shape → Texture ● Correction ● Starting and Ending

Correct line (Control point)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Control point	Control point	Control point

Correct line (Pinch vector line)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Pinch line	Pinch line	Pinch line

Correct line (Redraw vector line)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Redraw	Redraw	● Redraw ● Correction

Correct line (Redraw vector line width)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Redraw line width	Redraw line width	Redraw line width

Correct line (Simplify vector line/Connect vector line)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Edit line	Brush	● Edit line ● Brush size ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Correction ● Starting and Ending

Correct line (Correct line width)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Correct line width	Brush	● Correct line width ● Brush size ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Correction ● Starting and Ending

Correct line (Garbage cleaner)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Remove dust	Figure	● Remove dust ● Select From ● Figure ● Shape operation ● Correction

Correct line (Fill leftover)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Dust filtering	Brush	● Remove dust ● Select From ● Brush size ● Brush shape ● Brush shape → Brush tip ● Brush shape → Spraying effect ● Brush shape → Stroke ● Correction ● Starting and Ending

Correct line (Select garbage)

Input and output processes of the tool, and categories included in the tool are as follows.

Output process	Input process	Category
Selection	Lasso	● Marquee ● Remove dust ● Select From ● Correction